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THE ELEMENTARY SCHOOL JOURNAL

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Educational News and Editorial Comment

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In a New Cover and with a Broader Emphasis

Regular readers of the *Elementary School Journal* will observe that it is appearing in a new cover design and with some modifications in typographical arrangement. These changes will, we are sure, make the *Journal* more attractive and more readable. More important, however, is the new emphasis which will be given to certain aspects of American education. We wish to make it very clear that there will be no fundamental change of policy: every feature of the *Journal* will be retained, and we shall continue to publish reports of scientific investigations on such topics as the curriculum, methods of instruction, classroom management and supervision, tests and measurements, and the training of teachers. The policy of the *Journal* has always been to give attention to the problems of school administration and to emphasize, to some extent, the educational implications of social change. It is to these last two phases of educational thought and action that additional attention will be given in the future. The impact on our economy of invention and technology is creating for children and youth, and for their mentors as well, a novel and perplexing world. From the changing status of young people in American life many of the major problems of education

emerge. As never before, teachers and school administrators should have a clear insight into the social forces that are transforming American civilization. These forces are slowly but surely determining the school's philosophy, defining its social obligations, prescribing its curriculum content, and fashioning the form of its structural organization. In the future, teachers and administrators who confine their attention to what goes on within the school and who are uninformed with respect to the rapidly shifting social scene outside will be poorly equipped to perform their educational responsibilities. It is for these reasons that we shall give an enlarged emphasis in the *Elementary School Journal* to the relation of education and social change.

Significant Study of Human Resources in the United States

THE recent report of the Committee on Population Problems to the National Resources Committee, entitled *The Problems of a Changing Population*, presents a discussion of many of the basic problems of American life which must be faced within the next generation. This document merits careful reading by every teacher and school administrator in the United States because it contains a wealth of factual information essential to an understanding of some of the major social and economic changes that are taking place in the nation.

The first section of the report analyzes trends in population growth. The birth-rate has been declining in this country for nearly a century, but the decline has been particularly sharp in recent years. At present, fertility in the nation as a whole is somewhat below what is required for family replacement; it is estimated that sometime between 1960 and 1980 the total population will reach its maximum growth and from then on will remain stabilized or will begin to decline. The changing age structure of the population is creating social and economic problems of the first magnitude. Although we are becoming a nation of elders, "we are not rapidly becoming a nation in wheel chairs, dependent for support on a vanishing company of productive workers." In fact it appears that the percentage of the population in the productive age group, twenty to sixty-four, will be

greater during the twentieth century than the proportion during the nineteenth. The greater part of this increase, however, will be in the age class of forty-five to sixty-four. Thus the problem of the older worker becomes one of major importance; in some way the economic structure must be adjusted to provide employment opportunity for older persons still able and willing to work. At least there will be an increasing number of aged persons who will have to be released from productive activity. At present there are in the population about 7,500,000 persons above sixty-five; in 1980 there will be about 22,000,000 in this age class.

In some quarters there is a tendency to take alarm at the declining fertility of the American people. The authors of this report strike an optimistic note in the following comment: "It is apparent, too, that the slowing-down of population growth in the United States will leave this nation in a peculiarly advantageous position, as to the relation of total population to total natural resources. The situation is one that opens great possibilities for further economic and social advances."

A second section of the report presents a particularly informative discussion of regional distribution of economic opportunity. Data are included which show variations in levels of living, in per capita income, in average agricultural productivity per worker, in regional distribution of industrial employment, and in other aspects of the economic life of the major regions. A county-by-county analysis of planes of living is especially revealing. Regional differences in per capita income are very marked, but the most striking differences are between the farm and the non-farm population. For the nation as a whole, per capita income of the non-farm population is estimated to be more than three times as great as the income of the farm population. Average net productivity per agricultural worker in the Southeast is only about 40 or 45 per cent of the figure for the rest of the country. Manufacturing is highly concentrated in the Northeast and the Middle States. Wage jobs in manufacturing enterprises are concentrated in relatively few areas; two hundred industrial counties provide nearly three-fourths of the total manufacturing employment and more than three-fourths of the wages paid. Moreover, the evidence indicates no marked trend toward a dispersion of industry.

An extended section of the report discusses trends in population redistribution. The American people have always been on the move, but internal migration has been increasing for several decades. Differentials in reproduction and differences in economic opportunity account, in large measure, for the constant reshuffling of the population. During the decade of the twenties the two main areas from which people were moving were (1) the states south of the Potomac and the Ohio Rivers and east of the Mississippi River, except Florida and (2) the states between the Rocky Mountains and the Mississippi River, except Arizona and Texas. Each of these areas lost about 1,700,000 persons. Most American cities have drawn a large percentage of their population from foreign countries or from states other than the state in which the city is located. "It is safe to say that, with the exception of a few southern cities, a large share of the 1930 population of all large cities (ranging from 30 to 80 per cent for the individual cities) was born elsewhere." The movement of people from farm to city has been dominated by young adults. "Approximately 40 per cent of the farm boys and girls who were ten to twenty years old in 1920 left the farm between 1920 and 1930." A large volume of internal migration may be expected in the future. An analysis of regional variations in economic opportunity gives evidence of serious maladjustment of population to resources, and from these areas, particularly the Southeast, where population pressure on the resource structure is intense, a large volume of outward migration may be expected. Moreover, the outlook is for a large volume of migration from farms to cities.

One of the most significant parts of the report deals with regional and racial differences in reproduction rates. The following paragraphs indicate the areas of low and high fertility.

It is, therefore, important to examine the reproduction rates that would result from continuation of the present birth and death rates. On this hypothesis, in one-fourth of the states one thousand white females would during their lifetime bear less than one thousand daughters. In six states (Oregon, New York, California, Washington, New Jersey, and Illinois), the white population would fail to reproduce itself by as much as 10 to 20 per cent. In six other states (Massachusetts, Rhode Island, Connecticut, Florida, Missouri, and Maryland) the deficit would be 10 per cent or less. In another ten states, extending in a belt south of the Great Lakes and north of the Ohio River, the white population

barely replaces itself, the excess being less than 10 per cent. In about half of the country, comprising more than 60 per cent of the total population, as soon as the relatively large proportion of the population now in the child-bearing ages passes into the older age groups, the number of daughters born will not be sufficient to maintain the parent generation, even if there is no further decline in fertility.

The group of states with low reproduction rates extends from southern New England westward through the states of the Middle West and north of the Ohio River, until it reaches Kansas, Nebraska, and Colorado. The Pacific Coast states and Florida complete the group. It should be noted that all the highly urban and industrial states except Michigan are included. On the other hand, the agricultural Southeast and Southwest (south of the Potomac and Ohio Rivers and westward to the Rocky Mountains) is a region of high fertility. Due partly to the presence of a relatively large Mexican population, many of whom are returned by census enumerators as "white," New Mexico leads the nation in fertility. A thousand "white" females there would bear about 1,600 daughters during their lifetime, at present rates of fertility and mortality. Utah, North Dakota, Arizona, Arkansas, Kentucky, and West Virginia are also characterized by very high fertility.

Fertility varies greatly in communities of different size; it decreases sharply as the size of the community increases. Urban communities are failing by 14 per cent to have enough children for family replacement, whereas fertility in the native white rural-farm population is 69 per cent greater than necessary to maintain a stable population. It is a very striking fact that natural increase is taking place most rapidly in areas where the levels of living are low. A county-by-county analysis of levels of living and of fertility shows that in the poorest areas fertility is 77 per cent in excess of that necessary for family replacement and that in areas with the highest level of living it is 17 per cent below that required to maintain the population at its present level.

Other sections of the report present discussions of social conditions affecting birth-rates, physical characteristics and biological inheritance, health and physical development, social development and education, and cultural diversity in American life. Teachers and school administrators will be especially interested in the section on "Social Development and Education," which discusses the function of education in American society, social forces and the expansion of American education, education in relation to population growth, education in relation to migration, education in relation to occupa-

tional trends, and tax resources and the costs of education. Differences in reproduction rates result in regional and community differences in the educational load; the child population of the nation is distributed very unevenly in relation to the supporting adult population and in relation to economic resources. The number of children of elementary-school age per thousand adults twenty to sixty-four years of age is as follows in one group of states: South Carolina, 523, North Carolina, 491, Alabama, 441, and Utah, 438. The ratios for a group of states at the other end of the scale are: Illinois, 270, New York, 254, and California, 225. There is a similar imbalance in the distribution of the educational load between rural and urban communities. In every part of the United States the rural-farm population is carrying an educational load far in excess of that carried by urban communities. Moreover, areas in which the supporting adult population has the heaviest burden of child support and education are, in general, areas which share least in the national income.

The following paragraphs dealing with tax resources and the costs of education are a strong argument for federal aid to education.

The maintenance of schools in this country has commonly been regarded as solely a matter of local or state concern. This traditional policy may be called into question for a number of reasons, most particularly with reference to current population trends. As already pointed out, there are gross inequalities in the educational opportunities open to young people in different parts of the United States. For millions of children the opportunity for anything more than a modicum of meager, formal education is largely conditioned by place of birth. Furthermore, there is in general little educational opportunity in the very areas where natural increase is so great that these regions are constantly sending forth migrants to other parts of the country. This situation strains the fabric of American social life. It challenges serious attention and calls for thorough investigation.

Further analysis shows that inadequacy of financial resources available for education in rural areas, and especially in rural areas of restricted economic opportunity, is a major factor in this unfortunate situation. . . . .

The income of all families, divided by the number of children of school age, amounts to over $3,000 per child in sixteen states. The corresponding amount is less than $1,500 in eleven other states. The total income of the farm population in the Northeast, if divided among the children of school age in that region, would yield $1,326 per child; that of the farm population in the Middle States and Southwest would yield about $900; the figure in the Far West is much higher, while in the Southeast it is only $474. The relative position of farm

population as a whole is revealed by the fact that the farm population, with only about 9 per cent of the nation's income, was responsible, except as aided from other sources such as taxes from railroads and other public utilities, for the education of 31 per cent of the nation's children.

A more specific measure of the relative ability of different states to support education is afforded by estimates of "tax resources," that is, the revenue that would be supplied if a given model tax plan were applied uniformly in all states. Two studies of the taxpaying ability of the states are available for this purpose. That by Newcomer represents an index (based on ten statistical series) of the ability of the different states to pay taxes under as nearly an ideal tax system as in her judgment could practically be devised. The estimates by Chism are on the basis of a model tax plan developed by a committee of the National Tax Association. The two plans do not employ precisely the same tax structure nor the same rates of taxation. The average yield per state is higher in Chism's estimates than it is on the basis of Newcomer's procedure. There are some striking differences between the two plans in the ranking of individual states. These measures are obviously not infallible; but they do reveal significant differences in the per capita tax resources of different states.

An index of the relative ability of different states to support education is obtained, for present purposes, by relating the total expected revenue in any state to the number of children of school age in that state.

$$\text{Ability} = \frac{\text{Tax resources available under model tax plan}}{\text{Number of children aged 5 to 17 years}}$$

By applying this formula one is able to show the amount of taxes that would be raised per child of school age if the state should apply either the Newcomer or the Chism tax plan. It is not to be assumed, of course, that all the taxes available per child could be spent for education. The other costs of state and local government would have to be met from the same tax resources; and these costs vary from state to state. But if a tax plan in one state yields annually only $75 per child of school age, and the same plan in another state yields $150 per child, it is obvious that the two states are very unequally situated with reference to their ability to support education. On the Newcomer formula the average yield per child of school age for all states is $155; the result is nearly 40 per cent higher on the Chism formula. The results for individual states on the former basis range from $50 or less in North and South Carolina, Georgia, Alabama, Mississippi, and Arkansas ($51 in Louisiana) to $200 or over in Massachusetts, Connecticut, New York, New Jersey, Delaware, Illinois, Nevada, and California. On the Chism formula all of the states in the first series show values under $90, and all of the states in the second series show values over $280, except Delaware, which receives a very different rating in the two series . . . . .

Perhaps the most striking result of this inquiry is that there is in general no significant correlation on either index between the adequacy of financial sup-

port for education in different states, as measured by expenditure for education per child of school age, and financial effort, as measured by the ratio of total expenditure for education to total tax resources . . . . .

Among those states that rank high in adequacy of financial support, some, such as Wyoming, Montana, Colorado, and North Dakota, also rank high in relative effort; and others, among them New York, Massachusetts, Connecticut, Iowa, and Nevada, rank relatively high in adequacy and relatively low in effort. On the other hand, among the states that rank low in adequacy, a few, such as Mississippi, North and South Carolina, New Mexico, and Alabama, rank relatively high in effort.

The evidence indicates clearly that some states provide relatively adequate support for education with relatively little financial effort involved; others support their schools equally well as the result of great financial effort; and in others education is supported only meagerly, in spite of the fact that a comparatively large percentage of total tax resources is expended for that purpose. States with great economic resources on the whole support their schools adequately and with relative ease; states with limited resources almost without exception rank low in adequacy of financial support even though, in general, they put forth greater effort than the richer states. In those states providing the least adequate support for education the fundamental difficulty lies in lack of financial assets. Even though a model tax plan were put into effect in the poorer states, they would not be able to support their schools adequately. In many of these states it would require all, or more than all, the taxes that could be raised under a model tax plan to provide an amount per child equal to the national average expenditure per child of school age.

Here and There among the Schools

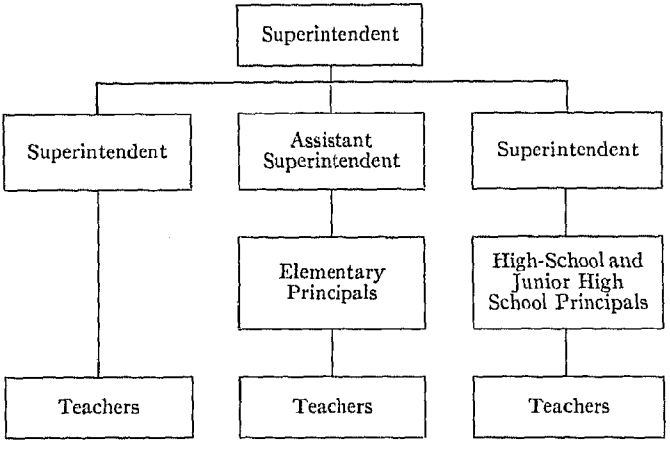
For a number of years we have run "Here and There among the Schools" as a special feature of the *Elementary School Journal.* Because of the interest which readers have expressed in this feature of the *Journal*, we shall continue it during the coming year. We cordially invite superintendents, principals, and teachers to submit to us accounts of any new approaches to the solution of their problems which may be of interest to other workers in the field.

A method for improving rural-school supervision It is commonly recognized that professional supervision of schools is an important means of improving the quality of instruction. In most urban communities the schools are supervised by professionally trained workers who devote full time

or nearly full time to the work of improving instruction. In contrast, the great majority of rural schools operate with a supervisory service that is wholly unworthy of the name, although it is precisely in these rural schools that supervision is most needed. As a class, teachers in the rural schools are much less adequately prepared than teachers in the city schools. Moreover, the responsibility of rural teachers is, in many ways, greater than that of urban teachers: rural teachers must teach a greater variety of subjects, often they must teach pupils in every grade from the first to the eighth, and they have administrative duties and community obligations which in cities are cared for by a trained personnel.

There are, however, indications of a growing sensitiveness to the needs and the problems of rural-school supervision. From J. J. Straight, superintendent of schools of Marion County, West Virginia, we have received a rather detailed account of a plan for the supervision of instruction in the schools of the county. Some of the schools are located in urban communities and some in the open country. The county unit for which supervision is to be supplied consists of 174 high-school teachers, 132 teachers in one- and two-room buildings, 140 elementary-school teachers under principals without teaching duties, 60 elementary-school teachers under principals with half-time available for supervision, and 84 elementary-school teachers in buildings in which the principal has no time free for supervision. There are twelve principals without teaching duties, seven principals teaching half-time, one assistant superintendent, and one superintendent. Superintendent Straight has attempted to work out the best type of organization to carry out supervision in a unit of this kind. Under the law there can be but one assistant superintendent for each two hundred teachers and no special supervisors. Apparently the law regards the principal as the director in both the administrative and the supervisory programs. The theory of vertical supervision is accepted for the schools of the county. The type of organization which is being developed is presented in the accompanying diagram.

ORGANIZATION FOR EFFECTING SUPERVISION
IN MARION COUNTY, WEST VIRGINIA



The plan calls for a functional distribution of responsibilities among the supervisory and the teaching personnel. The distribution is indicated in the following outline.

GROUPINGS SHOWING FUNCTIONAL RESPONSIBILITIES IN SCHOOLS OF MARION COUNTY, WEST VIRGINIA

Group	General Functions	When Meet
1. Superintendent and assistants	Determine general policies and general supervisory programs	On call of superintendent
2. Superintendent's Cabinet: superintendent, assistant superintendent, chairmen of all groups (3 to 7 below)	Advisory in formulating general policies and programs	On call of superintendent
3. Superintendent and junior and senior high school principals. Chairman—one of group	Specific supervisory program of general program. Divisional problems	Bimonthly, 3–5 P.M. Day to be set by group
4. Assistant superintendent and elementary principals. Chairman—one of group	Specific supervisory program of general program. Divisional problems	Bimonthly, 3:30–5:30 P.M. Day to be set by group
5. Superintendent and one- and two-room schools. Chairman—one of group (two groups)	Specific supervisory program of general program. Divisional problems	Once each month in two groups. Day and hour to be set by superintendent
6. Subject groups. Senior and junior high school teachers. Chairman for each group. Principal representatives	Unification of teaching. Program stimulation. Recommendation to divisional group	Once each month to be determined by group

Group	General Functions	When Meet
7. Elementary teachers by grades. Chairman for each group. Principal representatives	Unification of teaching. Program stimulation. Recommendation to divisional group	Once each month to be determined by group
8. Principals and building teachers. Principal always chairman	Local unit for vertical supervision in effecting specific supervisory program	Once each month and special on call

A special building for the handicapped children Superintendent Loy Norrix reports that the Board of Education of Kalamazoo, Michigan, has recently let a contract for a special education building which will house the work with orthopedic children, the hard of hearing and oral deaf, and the visually defective. It will also provide facilities for special health supervision and for a speech-corrective clinic. The building will be spacious enough to accommodate all pupils in the school system whose handicaps are too great for them to be transferred back to their normal grades.

Inventory of what children voluntarily select to read Last year Lydia M. Leistikow, principal of the Garfield Elementary School, Aberdeen, South Dakota, made a study of the voluntary reading interests of the pupils in her building with the view of securing factual information of value in planning a reading program. She has provided the following description of the plan of procedure, the findings, and the major conclusions.

No definite plan of procedure was adopted in advance. The interest of the pupils was first awakened through book-week activities in November. Visits to the city library, book displays within the school, a collection of books from the children's home libraries—all served to stimulate interest. As a means of securing a continuation of the interest throughout the year, a variety of recreational-reading activities were provided in a weekly story hour. Some pupils engaged in independent silent reading while others read aloud in small groups. Occasionally the hour was used for oral reports and dramatizations of books that pupils had enjoyed. The study continued from the first of November to the first of May. All children in the kindergarten through Grade VI participated in the program.

All pupils kept check lists of the books which they read during the year. This list included books at the public library, at home, and in school. The books selected for reading were voluntarily chosen by the pupils. The teachers were careful not to influence the children in their selections. Although the procedures differed throughout the school, certain tendencies were significant.

Interest summaries.—A survey of the books read by the children led to the following generalizations. (1) All children, regardless of ability, enjoy reading or listening to stories. (2) There is no limit to the variety of materials that children read. (3) Animal stories are a favorite with young children. Stories of children's experiences are next in importance in the lower grades, and these increase in importance at the third-grade level. (4) Folklore and fables are not read extensively in any grade. (5) Poetry is not read voluntarily by children of elementary-school age. (6) As a general thing, biographies are not chosen by children of this age. (7) The "Big-Little" books are read more extensively by boys than by girls. (8) Girls patronize the public library more than boys. (9) Boys exchange books with their friends more than girls. (10) Girls are more independent in their selection of books than boys. (11) Informational nature books are not so extensively read as nature books in story form. (12) The children's home libraries lacked books of the better quality.

Recommendations.—As a result of the findings enumerated, the building staff submitted the following recommendations as pertinent to their situation. (1) For the encouragement of the reading of better literature, teacher direction is necessary. (2) Classroom libraries should include a range of reading materials covering at least a three-year period. (3) Classroom libraries should contain enough titles to supply at least 50 per cent of the enrolment of each grade. (4) Teachers should prepare and encourage the use of a recommended list of titles. (5) Interpretations of reading should take the form of dramatization, oral reports, group conversation, and pictorial expression. (6) The school standards of book selection should be high enough to exclude books of inferior literary quality. (7) Parental co-operation in raising the standard of reading should be encouraged.

An Important Guide to the Use of Tests of Personality

Teachers at all levels are becoming increasingly aware that one of the most important and, at the same time, one of the most baffling problems which they confront is the problem of developing in children and youth what for the lack of a better term may be called a wholesome personality. Although there is no general agreement with respect to the number and the nature of personality traits or with respect to whether such traits actually exist, all recognize the importance of the factor of personality in the growth and the ultimate life-adjustment of the individual. The world of complex and changing social relationships which creates so much tension and maladjustment among adults has not left the child untouched; in the home, in the community, and in school the child is often faced with

situations which baffle and defeat. If the school is to meet its full responsibility, it must make the development of desirable personality characteristics one of its fundamental aims. To accomplish this end, the school must have reliable instruments for the measurement of personality. It is for these reasons that much attention has been given, during the past two decades, to the development of tests and devices for appraising the personality of children. Although hundreds of tests have been devised to measure the various aspects of character and personality, relatively few of them are sufficiently reliable to be of any great practical value. School administrators and teachers have been in need of an authoritative appraisal of the tests and devices for measuring personality in order that they may identify the instruments of most worth. Such an appraisal has recently been made by the Educational Records Bureau, 437 West Fifty-ninth Street, New York City, in a bulletin entitled *The Use of Tests and Rating Devices in the Appraisal of Personality.* The author, Arthur E. Traxler, comments on the general purpose and scope of the bulletin in the following paragraphs quoted from the Introduction.

This bulletin has been prepared to present a brief summary of the field of personality measurement, together with a description of some of the leading contemporary tests of personality and a summary of research dealing with them. The purpose is to provide a simple, nontechnical manual on personality measurement for teachers in service who may contemplate the use of personality tests in their work, but who are too busy to survey the whole field of personality evaluation in order to select the tests suited to their situation.

The need for a manual of this kind is fairly obvious. In the first place, there is a growing conviction that personality factors are fully as important in one's academic and out-of-school adjustment as are those more easily measured factors of intelligence and achievement concerning which schools have long kept records for their pupils. Studies have repeatedly shown that the correlation between academic aptitude and school success is only about .5 and the correlation between achievement tests and success in school is not very much higher; consequently, there is an increasing demand for valid and reliable records of personality development to assist the school in its guidance of the pupil and to be sent on to the college when the pupil is graduated.

In the second place, there are so many inferior instruments purporting to measure personality that busy teachers cannot find sufficient time to inspect all of them in order to find the few tests that hold out some promise of serving a practical purpose. The frequency with which attempts have been made to con-

struct tests or inventories of personality is indicated by several studies and bibliographies of personality measuring devices. . . . . It is safe to say that at the present time the number of published tests and inventories that may be loosely classified under the heading of personality is well over four hundred and probably does not fall far short of five hundred. The number of unpublished tests and devices for rating personality that are in use in local schools is no doubt even greater.

The second part of the bulletin is devoted to a relatively short, nontechnical discussion of procedures for appraising personality. These procedures are discussed under the following classifications: "Free Association Method," "Disguised and Partially Disguised Personality Tests," "Adjustment Questionnaires and Psychoneurotic Inventories," "Introversion-Extroversion," "Behavior Rating Scales," "Attitude Tests and Scales," "Interest Inventories," "Anecdotal Records and Behavior Descriptions," and "Factor Analysis in Personality Studies." The third part contains an annotated list of forty-five personality tests and rating devices. These tests are not recommended as the best now available, but it is believed by the author that they are among the most useful tests of their type. The annotations are unusually extensive and include results of research if available.

In Part IV tests and reading references for important aspects of personality are discussed at some length. The bulletin is concluded with a bibliography of 183 items.

Professor Grossnickle Replies

We have received the following communication from Professor Foster E. Grossnickle in reply to a criticism of an article of his published in a previous issue of the *Elementary School Journal*.

In the June, 1938, issue of the *Elementary School Journal*, Professor Howard Easley gave a critique of my article entitled, "The Effectiveness of Checking Subtraction by Addition." He offered three criticisms of the study. In inverse order of importance they were: "(1) errors in statistical techniques; (2) errors in experimental procedures; and (3) errors of interpretation." It will be shown here that, of the three criticisms mentioned, only the first can possibly be valid. The formula $P.E._{diff.} = \sqrt{P.E._{M1}^2 + P.E._{M2}^2}$ was used instead of the formula $P.E._{diff.} = \sqrt{P.E._{M1}^2 + P.E._{M2}^2 - 2r_{12}\,P.E._{M1}\,P.E._{M2}}$. Even with the assumed $r = .80$ (very probably too high), the difference in favor of checking gave a

significant critical ratio in only three grades, and the difference in favor of not checking gave a significant critical ratio in only two. In the other four grades the difference between the means of the groups was due to chance. These results are still in agreement with the conclusions offered in my study, one of which was: "there was only a chance difference between the mean accuracy of the group of pupils when they checked the final test and their mean accuracy when they did not check."

The underlying philosophy back of the study was evidently not understood by Professor Easley. For a decade or more there has been much discussion about 100 per cent accuracy and means for attaining it. Checking has been assumed to be a means for securing accuracy. My study was made to see whether checking is an effective aid for achieving accuracy. The required experimental procedures which Easley mentions, such as control groups, group rotation, equated groups and the like, have no place in a study of this kind. A growth curve was not shown because only final results were of value. The problem for consideration is whether checking is or is not an effective means of eliminating errors in subtraction. It makes no difference in the interpretation of the results whether the errors were eliminated in the first week of practice or in the *n*th week so long as they were finally eliminated.

The writer of the critique was disturbed because a survey of errors, made during the learning of subtraction, was included in the study. Easley stated, "It is difficult to see how a summary of errors made during the whole twelve weeks of practice gives any results significant for learning, since these errors are largely errors in checking, and not in subtraction. . . . ." The summary of errors was a by-product of the study; it was not intended that from this summary the conclusion should be made that the errors were errors in checking and not in subtraction. There would have been almost no checking errors if there had not first been subtraction errors which caused the pupils, in most cases, to force the check.

Apparently the crux of the critique by Easley is embodied in its last sentence: "Indeed, it may well be wondered whether in this study checking was *taught* as a process or merely *required* as a mechanical trick." My study was made in a *drill* program in regular classes in arithmetic. Each pupil whose record was studied was required to correct each of his papers before it was finally accepted. Each week the teacher stressed the meaning of a valid check. Those pupils who had perfect scores were praised. About the only conventional things omitted which are usually included in a drill program for securing satisfactory results were gold stars and cash awards. As was pointed out in my article, the significance of a check cannot be comprehended at the third-grade level. The results reported are the results in *efficiency* as determined by accuracy. These results are in agreement with those reported by Brownell and Chazal.[1] A program of drill

[1] William A. Brownell, and Charlotte B. Chazal, "The Effects of Premature Drill in Third-Grade Arithmetic," *Journal of Educational Research*, XXIX (September, 1935), 17–28.

does "improve," "fix," "maintain," and "rehabituate" skills which have already been assured by prior instruction. No pupil interviews were conducted for the purpose of studying the growth in the more mature forms of quantitative thinking. The evidence therefore forces the conclusion that the checking requirement had no practical value. If Professor Easley has succeeded in so presenting checking that it was *taught* with understanding, he should not be so modest and hide his light under a bushel. Many who now are in darkness will be enlightened if he will reveal his procedure.

Who's Who for September

The authors of articles in the current issue Edwin H. Reeder, professor of education at the University of Illinois. Arthur I. Gates, professor of education at Teachers College, Columbia University. David H. Russell, assistant professor of education at the University of Saskatchewan. Nicholas Moseley, consultant of the General Education Board, New York City. John W. Dickey, instructor in education and mathematics, New Jersey State Teachers College, Newark, New Jersey. Winifred Weldin, chairman of the kindergarten-primary curriculum at the New Jersey State Teachers College, Trenton, New Jersey. Leo J. Brueckner, professor of elementary education at the University of Minnesota.

The writers of reviews in the current issue William A. Brownell, professor of educational psychology at Duke University. Douglas E. Scates, director of research in the public schools of Cincinnati, Ohio. B. F. Pittenger, dean of the School of Education of the University of Texas. Frederick S. Breed, associate professor of education at the University of Chicago. Roy Ivan Johnson, director of the Division of Skills and Techniques at Stephens College, Columbia, Missouri. Howard R. Anderson, assistant professor of education at Cornell University; chairman of Junior and Senior High School Social Studies Departments in the public schools of Ithaca, New York, and director of student teaching in co-operation with Cornell University.

A NEGLECTED ASPECT OF SUPERVISION

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*

SIR ARCHIBALD GEIKIE, the British geographer once had the following to say about teaching geography.

> In the teaching of geography as in instruction of every kind, the fundamental condition for success is that the teacher has so thoroughly mastered the subject himself and takes so much real interest in it, that he can speak to his pupils about it, not in the set phrases of a class book, but out of the fulness of his own knowledge, being quick to draw his most effective illustrations from the daily experience of those to whom he addresses himself.[1]

If Geikie is right in this statement, then anyone who is familiar with conditions in American schools will have to admit that a painfully large number of the teachers cannot meet his "fundamental condition for success." Indeed, this statement is so obvious that it does not need to be dwelt on here. The mere fact that textbooks in the United States are the most complete and the most elaborate in the world and that they are slavishly followed by a vast number of teachers is sufficient evidence of the meager subject-matter preparation of hosts of teachers.

To lay this situation at the doors of the teacher-training institutions is to offer an explanation which is both too simple and definitely unfair. It is safe to say that every two-year teacher-training institution in the country is facing an utterly impossible task. The responsibility for the presence in the schools of teachers who are poorly trained in subject matter is, then, shared by the American people, for they have been unwilling to pay salaries high enough to justify four years of training as a prerequisite for the profession.

Even in the four-year training institutions, the task of preparing teachers who are well enough qualified in subject matter to meet

[1] Quoted in *Baltimore County, Maryland, Public Schools Course of Study*, Part III, p. 215. Baltimore: Warwick & York, Inc., 1931 (complete edition).

Geikie's "fundamental condition for success" is still well-nigh impossible. The profession of education is unique among the professions in the character of the knowledge which it demands. A contrast with another profession will make this point clear.

If one is planning a college curriculum in chemical engineering, the task is considered only from the point of view of the relation of chemistry to industry. The basic principles of chemistry are studied, and, as the student progresses, he learns how those principles function in the world of manufacturing. There is about the training a homogeneity evident to anyone who examines the list of courses. To be sure, mathematics may be required, but it is mastered because it is necessary for advanced work in chemistry. The only nontechnical courses which are likely to be required are those in rhetoric and English and some study of foreign languages.

If we now consider the problem of preparing teachers, we cannot fail to be impressed at once with the contrast in the nature of the problem. Homogeneity disappears, to be replaced by heterogeneity. There are at least three major fields in which every teacher ought to be prepared.

In the first place, teachers should be thoroughly acquainted with techniques in teaching. Many of the basic techniques of teaching the school subjects have been discovered through painstaking, scholarly research. Without a knowledge of the findings of such research, a teacher will be sure to blunder in his work and waste the time of the pupils. Of course the search for good techniques has far to go; a vast amount of research still needs to be done. Nevertheless, the teacher-training institution must acquaint its students with what is now known, or it fails in its duty.

In the second place, teachers ought to be something more than mere routine technicians. They are dealing both with growing, developing, individual human personalities and with the ways in which these personalities function in a changing, constantly evolving world of human thought and scientific achievement. Teachers ought to understand, therefore, what has been thought about the problem of education in the past and how education has functioned in earlier human societies. Students of education must also know how the

human mind works; they must be informed, too, on the main facts of the contemporary social and economic scene. Hence another aspect of teacher training must deal with fundamental courses in the history and philosophy of education, in educational psychology, and in the fields of economics and sociology.

Finally, the teacher must have something to teach. He must have "so thoroughly mastered" what he is to teach that he can place at the disposal of his pupils a rich store of facts and ideas, drawn from a varied experience.

If a teacher in the schools were faced with the task of teaching only one subject, the problem for the teacher-training institution would not be so overwhelming. The elementary-school curriculum embraces knowledge from a great variety of fields, and this situation is becoming more and more intensified by the continuous enrichment in recent years of the elementary-school course of study. Every study of the subjects in which high-school teachers are required to give instruction has shown that only in the large high schools in big cities do the teachers teach only one subject. A recent study by the North Central Association of Colleges and Secondary Schools shows that in the high schools in Illinois it is impossible to predict what a teacher with special training in the social studies, for example, may be expected to teach in addition to his field of major work.[1]

The situation described is not a happy one. Moreover, there seems no immediate possibility that it will be alleviated. Until the American people are wise enough to pay adequate salaries for teachers so that the one- or two-year teacher-training institution shall cease to exist and shall be replaced by a five- or six-year institution, and until the high schools work out and accept (if not for the country as a whole, at least for such areas as are served by a given group of teacher-training institutions) a common instructional pattern in subjects to be taught by one teacher, just so long will American schools have to be taught by teachers inadequately trained in subject matter and therefore lacking in Geikie's "fundamental condition for success."

[1] Frank E. Henzlik (Chairman), "Subject Matter Preparation of Secondary School Teachers," *North Central Association Quarterly*, XII (April, 1938), 439–539.

In the meantime schools must continue to do the best they can, for millions of children must be educated. What means can be employed to make the best of the situation as it is and to insure progress in the instruction given in the schools?

In my judgment, the answer lies in the development of what is at present a relatively neglected field of supervision, namely, leadership in subject matter on the part of the supervisor. The word "supervisor" is used to mean not only a school officer designated by that name but any person in a school system whose duty it is to exercise professional leadership in the improvement of instruction, whether he be called "supervisor," "principal," "assistant superintendent," or "department head." The general movement in the United States to regard the principal as the immediate supervisory leader of the teachers in his school is too well understood by the reader to need further comment. When, therefore, the word "supervisor" is used in this article, reference is made as much to the principal in his supervisory capacity as to any person who bears the title of supervisor.

A review of many of the books in the field of supervision impressed me anew with the richness of this literature. There are thousands of pages of excellent material on methods of observing a recitation and of discussing it later with the teacher in a supervisory interview. There are check lists galore to make supervision more scientific. There are discussions of the conduct of teachers' meetings, of the preparation of supervisory bulletins, of the stimulation of teachers to do professional reading.

Throughout all these discussions, however, the emphasis is on the supervisor as a leader in teaching technique. A pitifully meager number of pages in the books on supervision is devoted to methods and techniques which the supervisor may use to stimulate and guide his teachers into a richer, deeper, more adequate knowledge of what they are teaching. The question of what a supervisor should do if he notes a mistake in the subject matter of a teacher's instruction is sometimes raised, but that is an almost infinitesimal part of the total problem.

Only one technique of subject-matter leadership has received

anything like adequate treatment, namely, the technique of constructing courses of study. Research has been conducted in this field, and many valuable findings have been recorded and discussed. Since this aspect of the problem has been given attention, it will be merely mentioned here, and other possibilities will be given consideration.

The word "possibilities" is used advisedly. In the present dearth of research on the subject, I am well aware that I am in the field of speculation—a field, however, in which it is not unusual for a college professor to find himself. If anything said here stimulates some student of supervision to research on the question of subject-matter leadership or if some supervisor finds the suggested possibilities helpful in his work, this excursion into the field of speculation will have been worth while.

To begin with, it seems obvious that, if a supervisor is to display leadership in subject matter, he himself must read widely—and here professional reading is not under consideration. Supervisors sometimes say that the amount of professional reading which they must do leaves them no time for general literature. These supervisors are simply stating that they do not have time to do their jobs well. If research shows that supervisors do not have time for general reading, then some means *must* be found to lighten their other tasks so that they will have time. Moreover, if keeping up with contemporary professional literature precludes the possibility of general reading for a supervisor, he had better let some of the professional reading go.

If a supervisor reads widely in biography, in travel, in history, in literature, in contemporary social and economic speculations, he will seldom visit a classroom without being able in the supervisory interview to suggest books or magazine articles which will help the teacher to enrich or vivify his teaching of the topics under discussion. Moreover, teachers are quick to sense possibilities for help, and the widely read supervisor will probably find himself besieged with requests for suggestions and advice on subject-matter source material. Teachers will come to think of him, not merely as a leader in teaching technique, but as a leader in knowledge of materials of instruction as

well. A school in which this situation prevails will be a school in which the subject matter of instruction will not be dead and static, but live and dynamic.

Second, the supervisor who takes the problem of subject-matter leadership seriously will utilize many of his teachers' meetings for developing a richer subject-matter background among his teachers. Such meetings may be devoted to reviews of new books or magazine articles; to the reading, perhaps, of some recent poetry or fine prose; to the discussion of some new theories of political or social leaders.

A supervisor of my acquaintance once told me that she was impressed by the lack in her teachers of a general knowledge of geographical principles. The teachers knew their elementary-school textbooks thoroughly; place locations, boundaries, and products were at their mental finger tips; but their general background of knowledge of how mankind interacts with his natural environment and why a given environment has its particular characteristics was too meager for good teaching of geography. A week before a regular teachers' meeting the supervisor sent out a mimeographed sheet to the teachers, on which she had drawn a hypothetical continent, with mountain ranges and latitude indicated. She asked the teachers to consider and to be ready to discuss such problems as the direction of prevailing winds on this continent, probable rainfall in different sections, probable deserts, probable regions of agriculture and grazing, and probable location of some cities. Then she suggested that the teachers also consider the question: "Suppose this continent were moved north thirty degrees. How would the answers to these questions be changed?" She reported that this mimeographed sheet led to one of the liveliest teachers' meetings which she had ever held. The meeting stimulated the teachers to wider reading in the principles of geography and was responsible for some changes in methods of classroom instruction.

The fact that this supervisor sent out the mimeographed sheet a week before the meeting is significant. Teachers' meetings which are devoted to subject matter should be carefully planned. Often materials should be prepared in advance and sent to teachers. Frequently such meetings may be placed in charge of an individual or a com-

mittee that has had a desire and an opportunity to prepare a special report on some phase of subject matter.

A third way in which a supervisor may exert subject-matter leadership is through supervisory bulletins. Meetings such as those just described should often be followed by a bulletin summarizing the facts and ideas which are suggested by the discussion. The supervisor who reads widely will also want to use bulletins for reviews of books and of articles which will be of assistance to the teachers in widening their subject-matter backgrounds. Teachers should be encouraged to use the bulletins for sharing with their colleagues information about new materials that they may have discovered. The bulletin may become a clearing-house for information about materials available for classroom use, visual aids as well as printed materials.

There is one aspect of this matter of mimeographed supervisory bulletins which deserves particular attention. It is probable that a large amount of mimeographed material in the schools makes practically a nonstop flight from the principal's office over the teacher's desk into the dark and remote recesses of a lower drawer, where it reposes in quiet obscurity until spring housecleaning. It then finishes its journey by being swept into the wastebasket. If the taxpayers who pay the bills for mimeograph supplies really knew how much material is treated in this manner, there might be a nation-wide protest on the subject. This situation is not primarily the fault of the teacher. Supervisors have usually furnished to teachers neither the means nor the method of filing these materials efficiently. It is easy to say that a resourceful teacher will find means and method, but it might as well be admitted that the majority of teachers will not exercise their ingenuity. Moreover, the real responsibility in the matter rests with the supervisor.

If teachers were furnished with spring-back, loose-leaf binders and a small file box for three-by-five cards and if each bulletin carried both an accession number and suggestions for subject headings for alphabetical filing on the index cards, the matter could be very efficiently managed. If the bulletins were bound in the loose-leaf binder in separate volumes by years, the teachers would be able to

refer to any volume and any bulletin in a few minutes' time. The bulletins would then constitute a cumulative source of facts, ideas, and materials and would become a constant help and inspiration to teachers.

Building up a good library in a school or a school system is a fourth way in which supervisors may exert leadership in subject matter. At present the average school library consists chiefly of two kinds of books: books for children and professional books for teachers. The library should also contain a third type, namely, unusually fine books in subject-matter fields. It is true that a good public library contains these books, but the same thing may be said of practically all the books that a person buys for his personal library. Most of these books are chosen because the owner wants to read them again and again, because he wants to have them easily available. Similarly, there are many books which should be selected by supervisor and teachers because they are of special or unique value to teachers and will, therefore, be consulted frequently. For example, Doughty's *Travels in Arabia Deserta* is the classic description of life in the desert; it will be needed again and again by teachers of geography or history. In the same class are such books as Beard and Beard's *The Rise of American Civilization*, Bowman's *Geography in Relation to the Social Sciences*, Semple's *Influences of Geographic Environment*, Huntington's *The Pulse of Asia*, or Van Doren's *Anthology of World Poetry*. One of my graduate students consulted with me recently, telling me that she had to teach geography in a junior high school and that she hated the subject. I told her that perhaps her dislike was due to the fact that she did not know enough about it and suggested that she read one or two books, not on how to teach geography, but on the subject itself. Later she told me that the reading had opened up to her a new realm of meanings. This situation could, undoubtedly, be duplicated over and over in the schools if supervisors would establish good libraries and then stimulate the teachers to use them.

The conception of supervision described here implies that the supervisor should be not only a technician but also a broadly educated person. It also implies that he must be engaged in a con-

tinuous process of re-educating himself. His life should be one of continuous growth, not only in the techniques of his profession—important as these are—but also in the wisdom and culture of his time. This conception undoubtedly makes the task of being a supervisor a difficult one. It should be difficult. The greater financial rewards of the position, as well as its greater responsibilities, should mean that it ought not to be in any sense a sinecure. Advanced study is being required in an increasing degree to qualify a person as a supervisor. I am inclined to believe that any person who supervises should have had graduate courses in subject matter as well as in education. Certainly, anyone who is responsible for the supervision of teachers of literature, the social studies, or the natural sciences should have had graduate study in subject matter. Such graduate courses may reveal to the supervisor new areas of thought and study which will lead to new reading interests and fresh sources of knowledge. In a very real sense, a good graduate course is never completed; it is a continuous inspiration to the supervisor to do the kind of broad reading which is so necessary to the subject-matter leadership of his teachers.

A few years ago I had a talk with a young woman who had spent a year of graduate study to prepare her to assume the supervisory leadership in a state-wide program of curriculum-making in the social studies. I asked her what graduate courses she had taken in geography. She had taken none. "Then you did some graduate work in history or economics or sociology, I suppose," I said. "No," she had not. "What courses *did* you take?" I finally asked. The major part of her time had been devoted to a course in curriculum construction. In addition, she had taken a few methods courses.

In contrast, I am reminded of a principal of a school in Burlington, Vermont. With no thought of a Doctor's degree, she spent many of her summers in graduate work at a university, judiciously combining courses in education with those in subject matter. One year she took a graduate course in geography which consisted of a field trip through New England. The trip opened a new world to her. The next year, under her supervisory leadership, instruction in geography in her school made a real use of the local environment. Such

geographic terms as "erosion," "mountains," "plains," "divides," "navigable and unnavigable inland waters," "commerce," "textile manufacturing," and the like, as well as such concepts as the work of running water, the effect of relief on transportation routes, the effect of altitude on temperature, and a host of others, are all exemplified in the vicinity of Burlington. No longer did the teachers need to "speak in the set phrases of a classbook"; they were able to draw their "most effective illustrations from the daily experience" of their pupils.

The life of the supervisor who is a leader in subject matter may be arduous, yet it has rich compensations. There is inspiration in teaching children; there is also inspiration in teaching teachers. If the supervisor assists and inspires his teachers to grow in their knowledge of subject matter through supervisory conferences, through profitable teachers' meetings, through supervisory bulletins, and through the development of a good library, he will be amply repaid by the satisfaction which always comes to the good teacher when he sees that those whom he is instructing are growing and developing. In such a situation the supervisor becomes more than a technical adviser to teachers; he becomes their leader and guide into an ever richer teaching life.

TYPES OF MATERIALS, VOCABULARY BURDEN WORD ANALYSIS, AND OTHER FACTORS IN BEGINNING READING. I

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THIS series of two articles describes the results of an effort to evaluate the effects of several factors on the acquisition of reading ability in the beginning stages. It is based on data obtained from 354 pupils out of a total population of 382 comprising nine classes in four schools in the borough of Manhattan, New York City. Assistance in preparing materials, in conducting tests and observations, and in performing the statistical and clerical work was provided by research workers, including former teachers, under the Works Progress Administration.

The pupils were fairly representative of the population of New York City. The distribution of intelligence was approximately the mean given in the test manuals. The classes were mainly large. For most comparisons of data, presented later, groups were equated on the basis of mental age, mainly obtained from group tests, and scores on the Metropolitan Readiness Tests, which were given by the investigators in late September, 1936, about a month after the opening of schools.

In all the classes the pupils used as basal material the Gates-Huber primer[1] and the accompanying *Preparatory Book*—a loose-leaf workbook of ninety-six pages. When consideration is given to the results presented later, it must be recalled that the use of these materials was common to all classes and that other activities and materials were additional.

[1] Arthur I. Gates and Miriam Blanton Huber, The Work-Play Books: *Peter and Peggy* (Primer). New York: Macmillan Co., 1930.

Classes were obtained in which practices ordinarily varied or in which teachers agreed to effect certain variations during the course of the study. In this way it became possible to determine, with reasonable validity, the effects of differences in the total size of the reading vocabulary, in the type of material read, in the amount of work-type material employed, in the amount and the character of "phonics" or word analysis and word-study games, and in other features of the total program.

EFFECTS OF A LARGE ADDITIONAL AMOUNT OF "WORKBOOK" MATERIAL

The Gates-Huber primer and the ninety-six page *Preparatory Book* include 292 different words. The two books contain 9,356 running words, or approximately 32 for every different word. One factor studied was the effect of adding a large quantity of material similar to that in the preparatory book.

This supplementary practice material consisted of 173 mimeographed pages, 8½ by 11 inches in size, containing approximately 18,000 running words. These pages were of the following types: miscellaneous exercises in sentence reading and word recognition, 5 per cent; directions to draw, color, etc., without any accompanying story or selection, that is, mainly sentence reading, 5 per cent; short selections with a picture (line drawing) and directions to color the picture, 10 per cent; reading selections followed by comprehension exercises, 10 per cent; and reading selections with comprehension exercises and directions to color the picture, 70 per cent. A sample of the last type (without the drawing) is given on page 29.

Seven out of every ten pages were of this character; two more in every ten were similar except that they included either the comprehension exercise or the directions to color, but not both.

The supplementary practice materials were regarded by most observers as being less attractive in format (since they were mimeographed and the drawings were done by less expert artists) and less attractive in content than the printed, basal practice book.

The supplementary materials were similar in function to the practice book in that they were designed to give additional reading, word study, and review to the words in the basal reader. They contained

a negligible number of words not contained in the basal reader and workbook. They suffered, however, from similarity in content; it was very difficult for the relatively inexpert authors to maintain a high level of interest and general merit while avoiding duplication of the basal materials in substance and purpose and avoiding the use of "new" words.

A BIG BOX FOR THE CHILDREN

[Picture]

A man comes to the door.
The man is big. The man opens the door.
This man has a big brown box.
The box is for Peter and Peggy.
Mother says, "Children, open the box."
The children open the box. My, what is in the box?
There is a little train for Peter.
There is a big doll for Peggy.
Mother says, "Children, Father gives the train to Peter and the doll to Peggy."

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man / made — A — comes to the door. My, — white / what — is in the box?

The / There — is a little train for Peter.

Color the man brown. Color the box red.
Color the door green.

The following directions were sent to teachers employing these materials.

1. The mimeographed materials being used are intended to supplement the readers and workbooks used by the pupils and the manual for the first grade used by the teacher.

2. The materials have been carefully checked for vocabulary against the reader; in some cases new words are indicated. The corresponding page numbers or the sections of the chapter have been marked on the mimeographed material so the teacher will see that the subject matter in the workbook, reader, and mimeographed materials parallel one another throughout the semester.

3. The teacher will feel free to use the supplementary materials to meet the

individual needs of her class—there is no compulsion as to how they must be used. However, the materials have been arranged in a sequence which many teachers will find useful. This order is based on the approximate difficulty of the material which, of course, will vary for individuals and classes.

4. The suggested order for reading activities is: (*a*) the use of the printed workbook; (*b*) the use of the mimeographed materials marked IA-1, IA-2, 1B, 2A, etc.; (*c*) the reader; (*d*) the use of the second section of mimeographed material marked "Following chapter 1," etc.

Under section (*b*) above, the use of the mimeographed materials, a word of explanation should be given: In IA-1, the "I" stands for the primer chapter, "A" for the difficulty of the material, and the final "1" for the first section of the chapter, divided by pages. The sections marked "1B," "2B," etc., are more difficult material based on chapters 1, 2, etc., and some teachers may find it convenient to use the "B" difficulty material with the "Following chapter" material as mentioned in section (*d*) above, i.e., after the work in the reader.

5. It is expected that the teachers in their reading program will follow somewhat suggestions as given in the First-Grade Manual accompanying the Gates-Huber readers.

6. While there is no desire to place additional work on busy teachers, the teacher using the material is asked to keep a weekly record of the reading activities of the pupils in her class. This report may be only a page in length for the week or may be more detailed as the teacher wishes.

7. Comments on the material will be welcomed in the weekly reports of the reading activities of the class. If there are questions on it at any time, the teacher will feel free to call Dr. Russell.

Three classes, totaling 138 pupils, used the materials, and four classes, totaling 157 pupils served as control groups. The latter used the same basal materials but not the mimeographed matter. They used other materials and devices during the time spent by the former group on the mimeographed material. In each school an effort was made to secure for experimental and control groups classes which had about the same scores on intelligence and reading-readiness tests and which were handled by teachers of equal ability. Two additional classes used the mimeographed material less exclusively and less fully. Data from these are not included in the comparisons presented in this section.

Analysis of the data by classes showed several variables other than the experimental factor. The classes differed in size (from thirty-six to fifty, four containing from forty-eight to fifty pupils), in proportions of boys and girls, in intelligence, and in scores on the readiness

tests. When medians of the nine classes were used as the data, it was found that a coefficient of 0.65 existed between scores on the reading-readiness test and scores on the final reading-achievement test (given in February), .057 between mental age and reading status, and −.017 between class size and reading achievement. The girls exceeded the boys in reading achievement by about 0.07 of a reading grade. These data led to the elimination of all comparisons of total classes. Instead, from the total groups were selected two smaller groups as nearly as possible equivalent in the following respects: (1) mental age, (2) intelligence quotient, (3) score on Metropolitan Readiness Tests, and (4) proportion of boys and girls. We also secured approximately the same numbers in the groups from each school using the supplementary material and those not using the supplementary material and from classes of similar size. The final "supplementary group" contained 85 from the original 138 pupils; the "no-supplementary group," 82 from the original 157 pupils. In Table 1 the groups are reclassified according to score on the reading-readiness test, and the results are shown for these subgroups and for the "supplementary" and the "no-supplementary" groups as a whole.

The data for the entire group show that the large amount of work-type or practice materials (in addition to the primer and the ninety-six page *Preparatory Book*) produced no reliably greater achievement in reading during the first semester. Although all the differences are in favor of the groups using the supplementary mimeographed material, the differences are too unreliable to be taken as "significant."

It should be noted that the reading attainments for both groups were very good for the time of the year at which they were tested. The national norm for the Gates test at the time is a grade score of approximately 1.52; the four means for the present groups (1.74, 1.72, 1.71, and 1.70) are about two-tenths of a grade better. The mean reading grade based on all scores available for the entire population taking the final tests (354 children) was 1.68—slightly lower than the means for the two matched groups but nearly two-tenths of a grade above the norm.

Further study of the data showed that the effect of using the sup-

TABLE 1

COMPARISON OF READING ACHIEVEMENT OF FIRST-GRADE PUPILS CLASSIFIED ACCORDING TO SCORES ON METROPOLITAN READINESS TESTS AND ACCORDING TO USE OR NON-USE OF SPECIAL SUPPLEMENTARY MATERIAL

Classification	Group Using Supplementary Material	Group Not Using Supplementary Material	Difference in Favor of Group Using Supplementary Material	Standard Error of Difference
Number of cases:				
Reading-readiness scores of 85 and above	26	24	.....	.....
Reading-readiness scores of 70–84	31	29	.....	.....
Reading-readiness scores below 70	28	29	.....	.....
Entire group	85	82	.....	.....
Mean mental age (in months):				
Reading-readiness scores of 85 and above	83.4	83.3	0.1	.....
Reading-readiness scores of 70–84	74.2	73.6	0.6	.....
Reading-readiness scores below 70	63.8	65.4	−1.6	.....
Entire group	73.8	74.1	−0.3	.....
Mean score on Metropolitan Readiness Tests (September, 1936):				
Reading-readiness scores of 85 and above	93.2	93.3	−0.1	.....
Reading-readiness scores of 70–84	78.4	78.8	−0.4	.....
Reading-readiness scores below 70	52.5	52.2	0.3	.....
Entire group	74.4	74.5	−0.1	.....
Mean reading grade on Gates Primary Reading Test, Type 1, Word Recognition (February, 1937):				
Reading-readiness scores of 85 and above	1.82	1.92	−0.10	0.10
Reading-readiness scores of 70–84	1.80	1.78	0.02	0.08
Reading-readiness scores below 70	1.63	1.60	0.03	0.08
Entire group	1.74	1.71	0.03	0.06
Mean reading grade on Gates Primary Reading Test, Type 3, Paragraph Reading (February, 1937):				
Reading-readiness scores of 85 and above	1.75	1.81	−0.06	0.09
Reading-readiness scores of 70–84	1.73	1.67	0.06	0.08
Reading-readiness scores below 70	1.53	1.54	−0.01	0.07
Entire group	1.72	1.70	0.02	0.06

TABLE 1—*Continued*

Classification	Group Using Supplementary Material	Group Not Using Supplementary Material	Difference in Favor of Group Using Supplementary Material	Standard Error of Difference
Mean score on test of vocabulary of basal materials, word recognition (February, 1937):*				
Reading-readiness scores of 85 and above	30.6	30.2	0.4	2.2
Reading-readiness scores of 70–84	29.8	27.8	2.0	1.8
Reading-readiness scores below 70	26.0	24.8	1.2	1.6
Entire group	29.1	27.5	1.6	1.2
Mean score on test of vocabulary of basal materials, paragraph reading (February, 1937):†				
Reading-readiness scores of 85 and above	15.3	15.0	0.3	2.0
Reading-readiness scores of 70–84	14.8	13.4	1.4	1.9
Reading-readiness scores below 70	10.5	9.9	0.6	1.5
Entire group	13.4	13.0	0.4	0.9

* This test was composed of forty items which were similar to those in the Gates test but which were based entirely on words taught in the basal books.

† This test was composed of forty paragraphs which were similar to those in the Gates test but which contained only words used in the basal books.

plementary mimeographed material differed with the ability of the pupils. This fact is shown by the data in Table 1 which give the records for pupils in three classifications of high, intermediate, and low scores on the readiness test. These data show, first, that the reading abilities of the three groups corresponded, in general, to the mean scores on the first-grade readiness tests. It should be noted, moreover, that the reading-grade scores obtained by all groups were very good for the middle of the first year. The mean reading grades for the group with high reading-readiness scores corresponded to national norms for pupils who have completed from three-fourths to nine-tenths of the first-grade work, and the means for the low third in initial readiness ranged from the norms for the midyear up to more than a tenth higher.

These data also show that the large amount of mimeographed material gave no advantage to the group with the highest readiness

scores. Indeed, the difference between the scores on the Gates tests favored the control group (those using various other materials rather than those confined to the same vocabulary). The scores on the tests confined to the vocabulary of the basal materials were practically the same. This situation was sensed by most of the teachers who reported their belief that the additional materials were more than were desirable for the abler pupils.

In the case of the pupils with intermediate reading readiness, the scores of those who used the additional materials show practically no advantage in the Gates tests and some superiority in the tests confined to the vocabulary of the basal materials. In the low reading-readiness group no advantage for the supplementary material is shown by the standardized tests, and the slight superiority in the tests based on the vocabulary of the basal materials lacks satisfactory statistical reliability.

On theoretical grounds, some advantage would seem to inhere in providing children, especially those of average and lower-than-average ability to learn to read, with a large amount of reading material which is free of word-recognition difficulties. There is a widespread belief that during their first year many children rarely have anything to read which does not contain many unfamiliar words. As a result, either they are forced constantly to stop and study the word, or they are stalled by it or "guess" the wrong meaning. This procedure is a process of translation or study rather than free, uninterrupted reading—a process which would discourage most adults. In such a procedure, seemingly, the child would find it difficult to get the meaning either correctly or freely, his interest is likely to be lost, and he has little opportunity to practice free-moving, rhythmic progression along the line or other *reading* skills. If, on the other hand, the pupil first learns a group of new words in a body of interesting work-type and story materials and is then provided with many pages of interesting, new, reading content containing no additional words, it would seem that he would read with greater freedom, interest, and understanding and would secure better practice in the art of reading.

In the case of the results presented, several considerations should be noted. First, the primer and the preparatory book provide a relatively large number of repetitions for each new word. Some of the

materials, moreover, provide for motivated re-reading (as in the case of re-reading of directions while they are being carried out), perhaps enough, of certain types at least, for most pupils. Furthermore, the additional mimeographed material was largely of the "read-to-do," or workbook, type. It is possible that additional amounts of reading of narrative and informative selections without manual directions to execute, comprehension exercises to complete, questions to answer, etc., would have been more useful and interesting. Finally, it should be noted that, when a large amount of the workbook material is used, the time thus employed may cut into the time available for personal supervision, explanation, instruction, and guidance which the teacher would otherwise provide for individual children. Indeed, this possibility seemed especially important in the case of the slow learners.

The choice of classes for the study made it possible to rearrange the pupils in such ways as to yield some data on the foregoing possibilities. In the next article some data will be assembled on the effects of providing supplementary reading matter varying from material closely restricted to the basal vocabulary to material entirely unrestricted and introducing a large number of new words and a large total vocabulary.

[*To be concluded*]

POLITICS IN CITY-SCHOOL ADMINISTRATION

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NO PHRASE exercises our lips more than "Keep the schools out of politics." Yet every day, if we are honest with ourselves, we find political influence operating in school administration in the making of purchases, in the awarding of contracts, in the selecting of personnel, and in the adopting of policies. Political influence, of course, may be exercised legitimately for the general good of all citizens and may be considered necessary in a democracy. Even so, it is significant that nobody now thinks of politics as an honorable profession and that we cannot speak of "political influence" without a sinister feeling.

Outright graft is not unknown in school administration, although, except in the largest cities or in the purchase of sites and the erection of buildings, the amounts involved are slight. Everyone knows, however, that there is a great deal of local purchasing, personal favoritism, and stretching the spirit to fulfil the letter of the law. If the efficient management of a system for the direct and sole good of the children in the schools is the criterion, who is to cast the first stone at the politician campaigning on a platform of local purchasing? After a candidate has been elected on such a platform, is it surprising that he directs that all groceries for the home-economics courses be purchased from the provision merchant who is treasurer of the Republican town committee?

Manipulation of personnel is more directly in the political tradition. "To the victors belong the spoils." The average citizen seems to think no more about partisanship in appointments than he does about asking his alderman to "fix" a parking ticket for him. Both things are part of the game as it is played. Here, too, there are varying degrees of wrongdoing. The neighbor of a school-board member naturally finds it more convenient to ask him about bus

tickets for a child, or assignment to a room, or promotion, than to go direct to the school official in charge. If the board member then acts as intermediary and matters are adjusted—legitimately or illegitimately—to suit the neighbor, the member acquires a lien on the votes of a whole family. In most cases no harm is done, and the superintendent who can serve a school-board member in a matter of this kind feels that he himself has acquired merit. It is just as natural for the neighbor to ask the board member for a job for his daughter, for the member to help the neighbor, and the superintendent to help the member. It is then but a step to the point where board members try to secure positions for party adherents. From there it is only another step to a situation in which the controlling faction of the board of education creates positions to satisfy party demands for jobs or, even worse, dismisses incumbents to make room.

To make an appointment because of personal friendship is no doubt wrong, even if the appointee is well qualified, though this method is the method of business the world over. To make an appointment or to force a dismissal on the basis of party politics alone is the unforgivable sin. The friend at least knows his friend's strength and weakness. The mayor or the committee controlling party patronage too often knows only the party loyalty or even only the party influence of the candidate. For example, a girl appointed as stenographer by a certain board of education was the sister-in-law of a Republican town committeeman. On investigation the superintendent found that she had attended high school for three years but had received credit for less than two and was at the time working in a factory. She admitted in an interview her inability to do most of the routine office-work required, but it was only by threatening to spread her record over the front page of the local paper that he was able to exclude her from the position.

Politics is most often connected in our minds with graft and with partisan appointments. We do not stop to think that parties are the instruments by which public opinion is made effective and that without them there would be no voice for criticism, no refuge for the person with opinions opposed to those of the rulers. It is inevitable that there be conflict of opinion just as long as men are

individuals, and no school man who has been through the fight of closing an outlying one-room school can doubt the sincerity with which opposing opinions are maintained. He himself sees the advantages to the children in the way of companionship, material facilities, and more experienced teaching. He knows too how much more economical the consolidated school will be. The parents know that their children are able to do well where they are. The parents themselves probably attended that school. They know too that their children will be corrupted by contact with wicked city children. The busses will be wrecked at railway crossings. Then there is the question of a hot lunch. This difficulty was expressed graphically by a parent who said: "As soon as I left school, I began to carry a dinner pail to the factory. I won't have my kid living out of a pail from the cradle to the grave." Examples of sincere conflicts of opinion on school matters could be multiplied indefinitely.

Progressive education, not really well defined nor yet understood by educators themselves, is becoming a public issue. Take the case of Roslyn, New York, where the parents forced the school board to have a general survey of achievement because the children, so the parents said, were not learning their A B C's. On the other side of the fence, consider the case of a conservative acquaintance of mine for whom the handwriting is on the wall. A group of parents in his town believe in progressive methods, and year by year they are nominating and electing liberals to replace the conservative members on the school board who come up for election. Take the case of New York City, where a group of fundamentalists attacked the progressives as bad educators and Communists and, on the latter charge, tried to elicit the support of the large number of Catholic teachers in the system as a matter of conscience.

When things have reached this stage of public controversy, it is inevitable that progressive education will be an issue in political campaigns, just as consolidation, transportation, and bonds for buildings have been and often are issues. "Progressive education" has become a slogan, and the slogan in politics is a study in itself. A campaign was won with the battle cry "Tippecanoe and Tyler too," and one was lost overnight because of the phrase, "Rum, Romanism, and rebellion." When national campaigns are fought

and decided on the basis of meaningless or misunderstood phrases and when the real issues are too often beyond the people's understanding, the schools can hardly expect a better fate. If we, the people, are called on to decide fiscal policies not understood by the economists, there is no hope that local campaigns will not be fought on issues of educational theory not understood by the educationists.

Though one shudders in anticipation of some of the accusations which will be made in campaigns against "progressive education" and of some of the statistics which will be used to bolster opinions, the prospect is not uninteresting. The novel feature will be in the line-up of opposing forces. The attacking politicians will find their opposition more among the professional group than among opposing political leaders. The professional group must then decide whether to abide by their established tradition and refrain from an active part in campaigns, leaving the fate of their policies in the hands of the children's parents, or to organize for the fight. In either event, some will have to sacrifice their convictions and others their lives on the altar of their cause.

After all, the test of policies by the votes of the citizens is the established method of our democracy. If we listen to leaders who are opposing merely because they are in opposition and not because of sincere differences, if we rationalize our own shortcomings by blaming others and so make mistakes and actually retrogress, we still have the chance of changing our minds at a later date. Generally speaking, the opportunities we lose forever are a small price to pay for freedom.

This point of view does not absolve teachers and other professional workers from an obligation to understand the workings of politics so that they may help mold public opinion and may resist with intelligence the forces adverse to progress. They must know the evil as well as the good if they are to detect and resist crooked politics in the field of school administration. It is helpful to know that the story-book methods of graft—gifts, "kick-backs," bills wrapped around cigars—are now out of date. They are dangerous because illegal. But there is not usually a law prohibiting a company in which a school-board member holds stock from selling materials to a school or from constructing a school building. There is

no law to prevent a member's soliciting insurance business from employees or from successful bidders nor legal reason why a favor in the way of city business should not secure a favor in private business. Nevertheless, rules and regulations can be framed to prevent these practices and to insure free bidding according to standardized specifications, and independent auditors can be hired who will check the results.

Political sagacity can be useful in other ways than fighting the forces of evil. A wise superintendent in one of the larger cities of New England was employed on a one-year contract. At its expiration in January, three years ago, he was offered a two-year contract. At his special request the contract was issued for one year only. It was then renewable by the same board and in an off year politically, and the man was frank to explain that, if the board changed complexion he did not want them to act on his reappointment at a time when other city employees were being dismissed. Also he wanted a chance to work with a new board for a year before either he or they had to decide on their future relationship. For this reason he asked for a two-year contract the next time instead of the legal maximum of three. Some educators would be differently situated today had they had equal political insight.

The discussion seems to have come back to the subject of political appointments and dismissals. Why anyone should want to hold a public appointment which interrupts his normal career remains a mystery; but, when the plums are passed out, there are always eager takers, and tradition sanctions the system with all its waste. Sometimes, as has already been said, dismissals are made to provide jobs for political supporters. Sometimes they are made to punish a member of the opposition, although his office and his conduct of it may have been absolutely nonpolitical. Often a member of an opposing faction within a party is ousted as an example to help promote subsequent regularity in other office-holders. If for any reason a party machine wants to get rid of an appointee and does not feel strong enough to act at once, a running campaign of opposition and discrediting is conducted. The real motive may be to secure a school superintendent who will be complaisant about appointments, but this issue is bad to place before the public. The attack, then,

opens on policies, on mistakes by teachers, on the private life of the incumbent, and eventually he is so discredited that it is easy not to renew his contract. This method was used to oust a brave superintendent who refused to appoint the niece of a member of the board of education. It is not so dramatic as a "frame-up," but it is even more efficacious and far more safe.

The ways of bringing about the appointment of candidates who are politically right vary from the supposedly courteous suggestion to threats enforced by reprisals. Almost no politician has the courage to disclaim interest or ability in helping an aspirant, but he may claim that his recommendation is a mere formality. Nevertheless, he is probably disappointed if it is not accepted, and he is certainly pleased if it is efficacious. The mere formality gives way easily to the request for an appointment as a special favor, a hail-fellow-well-met basis of give and take. When he really means business, the political power is likely to call in the appointing authority and say, "I want you to appoint John Smith's daughter to the vacancy in the Andrew Jackson School." It makes no difference that the boss does not know the requirements for the position or even the qualifications of Mary Jane Smith. If the appointment is not made, the recalcitrant department head may find himself, to use movie phrases, "in the dog house" or even "off the lot."

One wonders why professional politicians, even the best of them, resort to methods which bring public disapproval and why they countenance actions which are obviously detrimental to the state. It is no excuse to say that private business does the same things, but it may be an explanation. If human beings are inherently weak or even if there are definite instincts that they must satisfy, certain recurrent patterns of political behavior must be expected. Graham Wallas went on this basis when writing his great book *Human Nature in Politics*, and many a practical politician has unconsciously used his knowledge of human nature as a guide. Catullus, writing two thousand years ago, told how even the amateur unsuccessful politician tried to make himself out somebody. Nobody can deny that it is nice to be recognized and to be offered privileges. Power has attractions too, and, almost paramount, there is the love of the game and of playing the game to win. That human beings

have not changed much is evident to any student of history. The words of advice offered by Quintus Cicero to his brother Marcus on the occasion of the latter's first candidacy for the consulship sound like a confidential letter to a political novice today. One quotation is given:

> A campaign for office is divided into two types of constant effort, one to gain the enthusiastic support of your friends, and the other the good will of the people. The support of friends must be secured by favors done and repaid . . . . and in a campaign the name of "friend" is extended much further than in private life.

Compare with this advice the following passage written in England sixty-five years ago by Anthony Trollope:

> But a party cannot afford to hide its face in its toga. A party has to be practical. A party can only live by having its share of Garters, lord-lieutenants, bishops, and attorney-generals. Though the country were ruined, the party should be supported.[1]

If these desires for office are human, it is only natural that politicians should strive to perfect devices by which they may gain or keep power and that, since power depends on votes, they will use every effort to line up voters. The party politician must consider the votes of the general public in the general elections, but just as important are votes in party caucuses or primaries, on which party control and nomination for office depend. Because the primary vote is much lighter, the control of a block of votes which can be produced becomes of tremendous importance. This situation explains the ruthlessness with which party bosses punish independence and the eagerness with which they construct machines. Bosses can rationalize their positions by pointing to the recognition of party government by our customs and laws and explaining the immense amount of more-or-less volunteer labor necessary to keep a party alive. They are right: if it were not for the hope of future reward, it would be difficult to find leaders, let alone rank and file, for the army of the opposition. Yet when we see what the rewards are and think of the cost, when we read the details of the operations of a Waterbury city-hall ring, of Tammany, of the Hynicka machine in Cincinnati, of the Thompson machine in Chicago, we are appalled.

[1] Anthony Trollope, *Phineas Redux*, p. 57. London: Chapman & Hall, 1876 (new edition).

The machines named have been exposed and ousted, but reforms of the past have been short-lived. Reforms to date have merely shown us that citizens, when aware of their plight and given good leadership, can secure good government. The possibility of reform and the short lives of reform movements combine to make us think that the real significance of dirty politics, of political interference in city-school administration, if you will, lies not in the weaknesses of human nature but in our system of education.

The importance of education to all forms of government has been universally recognized. The absolutists and the democrats alike know that it is possible so to indoctrinate their philosophy within a single generation that only a catastrophe can bring change. They know that through the use of schools planned for given objectives it is possible to train citizens to order. So far as recognition of the advantages and the place of education is concerned, it makes no difference that the managers of one form of government wish to produce soldiers and technically wise puppets, while the others plan to train their citizens to exercise free choice. The great question of today for those who prefer democracy is not the importance of education but the success of education. The bad political habits of candidates and office-holders, the very fact that the word "politician," which should be a man's boast, has become an insult, seem to show that education to produce good citizens has not yet been evolved.

It would be interesting to conduct an objective examination among voters about the details of our Constitution. Such a study would probably show a fair knowledge of, and general agreement with, the underlying philosophy, that is, with the ideal of equality and with the working principle of the greatest good for the greatest number. It is doubtful that many persons would answer correctly questions on the mechanics, even on the tripartite division of duties and powers. Most of those examined would, almost certainly, show that they do not use the Constitution as a working philosophy. The following list gives six ways in which our practice differs from our theory. (1) We talk of equality, but even in the case of education children in some districts receive more than twice as much as others. (2) We talk of the rule of the majority and for years submit to a curriculum legislated for us at the insistence of small but active pressure

groups. (3) We talk of representative government, and we find that boards of education act, not according to their own superior knowledge, but at the bidding of popular whims. (4) We uphold our form of government as the best in the world but denominate the persons who manage it "dirty politicians." (5) We talk of the duty of active participation but in effect disfranchise ourselves by failure to know about, and participate in, the nominating machinery of parties and by failure to vote if business or golf make it inconvenient to do so. (6) We talk about the necessity of trained, intelligent leadership, but we refuse to allow teachers a voice in party affairs.

If readers agree with these statements, they must, as educators, examine their consciences. Remember that, in theory, education for citizenship has been the backbone of democracies. The necessity of education was recognized by Plato. It was insisted upon by Washington and Jefferson. We are likely to ignore the theorists as voices of the outworn past. But should we forget the fate, not of the democracies of Greece and Rome, but of Italy and Spain? If our accomplishment in fact is so far from the ideal of theory, are we not perhaps overconfident? Has not general education up to the age of fourteen or more been prevalent long enough, and the emphasis on citizenship courses been sufficient, for us to consider the state of politics a fair criterion of the failure of education?

If education has failed, is it in content or in methods or because an impossible task is faced? A cynic, fresh from testing college students in Pennsylvania, defined education as "the casting of artificial pearls before genuine swine." We laugh at this, and the author of the jest would be the last to accept it as a truth. But may there not be truth in it? When we look at our politicians, can we say that education has even succeeded in training our best to be leaders?

Harold Laski, a believer in freedom, says:

> The right to education does not mean the right to an identical training for all citizens. It involves the discovery of capacity and the fitting of the discipline conferred to the type of capacity made known. . . . . But obviously, also, there is a minimum level below which no citizen can fall if he is to use the necessary intellectual instruments of our civilization. He must be trained to make judgments. He must learn to weigh evidence. He must learn to choose between

the alternatives between which he is called to decide. He must be made to feel that this is a world in which he can by the use of his mind and will shape at once outline and substance.[1]

Are the majority of pupils in the schools learning to make judgments, to weigh evidence, to choose between alternatives? Do they feel that they can, by the use of "mind and will, shape at once outline and substance"? When one reads Archibald MacLeish's *Land of the Free*, one feels that the schools have, at best, not fulfilled their possibilities.

In this state of affairs it would seem to be the task of scholars and teachers everywhere to plan how best to overhaul the content and the methods of courses in citizenship. The failures of present methods must be frankly faced, and efforts must be made to evaluate the various possibilities of improvement. Scholars must be keen in research and administrators bold to experiment; and all of us—scholars, administrators, teachers, and educated laymen—must recognize our responsibilities for leadership and take an active part in self-government.

PLEASANT READINGS IN POLITICS

ARISTOTLE. *The Politics and Economics of Aristotle*, particularly Book V.

KENT, FRANK R. *The Great Game of Politics*. Garden City, New York: Doubleday, Doran & Co., Inc., 1930 (revised).

MOSELEY, NICHOLAS. "Politics and School Administration," *Educational Progress and School Administration*, pp. 61–76. New Haven, Connecticut: Yale University Press, 1936.

SALTER, J. T. "Tony Nicollo," *Yale Review*, XXII (June, 1933), 770–81. (Also in his book *Boss Rule*. New York: McGraw-Hill Book Co., Inc., 1935.)

TAFT, CHARLES P. *City Management*. New York: Farrar & Rinehart, Inc., 1933.

TROLLOPE, ANTHONY. *Phineas Finn; Phineas Redux; The Duke's Children;* and other political novels.

WALLAS, GRAHAM. *Human Nature in Politics*. London, England: A. Constable & Co., Ltd., 1908.

[1] Harold J. Laski, *A Grammar of Politics*, p. 114. New Haven, Connecticut: Yale University Press, 1930 (revised).

ARITHMETIC AND GESTALT PSYCHOLOGY

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TODAY arithmetic is learned for two reasons: (1) for use as a tool in practical, everyday living and (2) as a means of gaining an appreciation of mathematics (including arithmetic, geometry, algebra, and analysis) as a system of thought created by man (5). In the first third of this century the practical aim was emphasized almost exclusively (10, 11, 16: 11, 26). Only within recent years has the social soil become increasingly fertile for the larger, appreciative aim (1, 8, 17, 18), which, strictly speaking, includes the practical aim as one of its subdivisions. This transformation to a new frame of reference in the objectives of arithmetic has been concomitant with the newer psychological explanation of learning, which has important significance for both the content and the method of arithmetic (2, 23).

It is the aim of this article to set forth in broad outline the newer psychological explanation of learning, together with some of its significance for the content and the method of arithmetic. By contrasting this increasingly accepted point of view with the older, mechanistic explanation which dominated arithmetic instruction during the "practical era," we shall gain some insight into the fuller significance of the organismic, or Gestalt, psychology of learning.

First, let us consider the older point of view, which is still dominant in many quarters. This psychology is basically associationism (22), and it has been best interpreted for education by Thorndike and his followers in terms of connectionism (19, 20, 21). Neurologically, these connections, or S–R bonds, were supposed to be formed at the synapse. Learning consisted in making modifications in these synapses, and exercise accompanied by an effect (pleasant effects being considered more favorable than unpleasant) was supposed to make for the bond-forming, or learning. Educationally, this point

of view meant that *drill* was to become the basic method for producing learning (12, 27). Drill with flash cards, games, practice pads, timed tests, and similar devices, which was accompanied by a pleasant effect produced by gold stars, praise, progress charts, marks, extra promotions, early dismissals, and the like, formed the basic methodology. In spite of the unsoundness of this psychological explanation of learning (9, 25), children did learn arithmetic with varying degrees of success (witness the results of studies on individual differences in arithmetic). The singular effect of this method of teaching and learning arithmetic was that the learnings functioned at their best as tools only and that little or no appreciation was gained of the inherent organization of the system of thought (3, 4, 6, 13, 15).

The newer psychology of learning, on the other hand, has more significant implications for arithmetic content and method. This psychology has been best formulated by the Gestalt following, as a result of extensive experimentation (7, 24). It explains learning in a larger frame of reference in terms of insight, goal, and maturation. The learnings take place, not through exercise and effect, but through insight; and the neurological changes are not modifications in definite synaptic connections but are differentiations of maturation patterns conceived as energy patterns, or systems, within the total psychophysical organism (14). These differentiations are made possible through the constant interpenetration of the individual with his environmental field. The flash of insight indicated by, "Oh, now I see," or "Now I've got it," or "There, it clicked," is the moment that learning takes place; and the learning, dynamically considered, manifests itself in *organized* thinking and not in isolated bonds. Thus, since learning takes place through insight, drill or mere repetition loses much of its force and assumes a new role. It is not used to "stamp in" a response but is a way of asking the learner to relinquish his already attained goal and search for the goal that the teacher desires him to have. The condition of an overdose of drill results shortly because, if the learner does not arrive at the desired goal within a few trials, he has not matured sufficiently to profit from further pressure. Learning is organized thinking, which grows

in complexity of organization through insightful experiences while the learner is in search for new goals.

This newer psychological explanation of learning works harmoniously with the added interest in the appreciative phases of the arithmetic content and method. In content, arithmetic must be clothed once more with sufficient meat to provide for a rich interrelation. In the past, when arithmetic was restricted to the "tool" value, the entering wedge which purged the curriculum was the practical problem—the problem used in daily life (16: 3–9). As a consequence arithmetic stands today as a skeleton stripped of much of its meat and "dry as bones." With the provision of an enriched curriculum, the methodology based on the newer psychology of learning will have a body of material with which it can operate dynamically.

The essence of a method based on a psychology of learning by insight is that the organized, or patternized, learnings are effected, not through isolated learnings, but through the manifold interrelations of the subject. This fact affects a number of factors in an interesting way. The curriculum must be presented in an organized manner and not in a chance fashion. The textbook of internal organization is necessary, but not sufficient. The teacher must develop with the pupils other organizations which are possible but not presented in the textbooks. Parenthetically, such teaching requires a cultural background in mathematics, which many teacher-training institutions are now attempting to provide. This viewpoint argues well for the "good, old" tables in addition, subtraction, and division; for the comparison of the processes of addition, subtraction, multiplication, division, powers, and roots; for the comparison of common and decimal fractions in a larger way than is customary; for the grouping of problems, not only around some social-science unit, but also around some principle basic to the solution of a type of problem, such as interest or measurement; and for mathematical recreations, including magic squares, puzzle problems, problems of antiquity, and many others. Here is seen the fallacy of trying to teach all arithmetic as an integral part of social science, as well as the fallacy of trying to teach arithmetic by the "contract" plan (where each child works, largely as a unit apart from the group). Both methods assume that arithmetic is merely a tool, and as a consequence both plans fail to

make the most of the many interrelations which are basic to organized thinking. With the help of the professionally prepared teacher, the arithmetic class per se, working together in a free exchange of the numerous interrelations inherent in a rich content, produces organized learnings which function optimally both in a practical and an appreciative manner.

Two examples given in outline will make more explicit something of the import of the pattern of thinking set forth in this article. Consider the organized interrelations inherent in a unit involving counting, addition, subtraction, multiplication, division, powers, and roots of whole numbers. All arithmetic starts with rational counting—counting of concrete objects, such as sheep, ponies, slaves. Because the fingers were so much involved in counting, the number ten became the base of our number system. When the ten digits (meaning *numbers* or *fingers*) were used once, a repetition called for new symbols, namely, 11, 12, 13, and so on. The "11" stands for "1" ten, a count which has already been reached, and "1" additional unit. The number "12" indicates "1" ten and "2" additional units. All the whole numbers have similar significance. The desire to count rapidly and with ease led to the processes of addition and subtraction. If seven things were counted and five more were grouped with the seven, the total of twelve might be reached by the long method of counting; or, after the correct total had been arrived at, the combined value of seven and five could be remembered for future use. In this way the addition and the subtraction combinations came into being. From Figure 1 these two processes are seen to be on a par and to rest immediately on "counting." By similar circumstances multiplication became the rapid way to add; division, the rapid way to subtract. These two processes are shown graphically in Figure 1 as being on a par and as growing out of addition and subtraction, respectively. Similarly, powers are seen to be on a level with roots and to be high-powered ways of multiplying and dividing. In more advanced work the study of logarithms and the slide rule shows powers and roots to be based on the comparison of the geometric series and the arithmetic series, that is, powers and roots are compared with multiplication and division, respectively. Throughout, the inverse processes of addition and subtraction, multiplication and division,

powers and roots are made intelligible by means of this organized approach of multiple interrelatedness. The reason for memorizing the 390 combinations is made intelligible. The role of repetition is here taken care of in an interesting and an organized manner.

As a second illustration of the patternized thinking needed in arithmetic today, the writer will organize in brief outline some of the

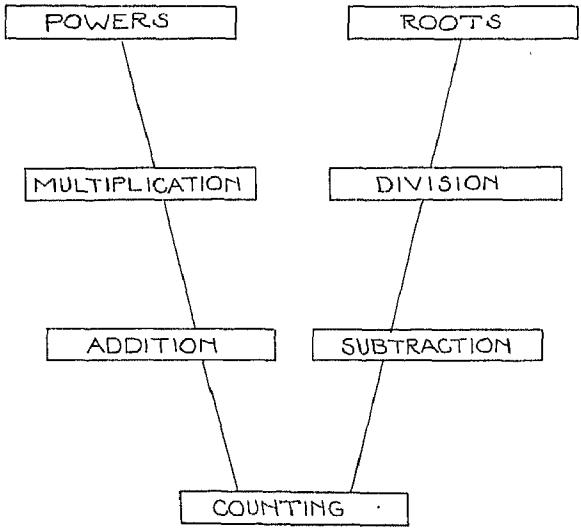

FIG. 1.—Organization of fundamental processes in arithmetic of whole numbers and fractions.

significant information about common fractions. Once more Figure 1 will serve as the framework. Again, counting is the starting point, and the counting of "broken pieces" of the same length is the most rudimentary form of thinking when it is planned to combine the "pieces" into larger units. This fact explains why the "unit" fractions were the first to be used; why similar fractions (those with like denominators) are taught first; why improper fractions were for many centuries "improper"; why we prefer to group many parts into as many wholes as we can (reducing improper fractions to whole or mixed numbers); and why objective materials are good means to

use in the original presentation of fractions. When addition or subtraction is considered, something of the force of the "must" is realized when common denominators are found before addition or subtraction is performed. It is too difficult to piece together the "broken pieces" into wholes of full length, or conceptual parts of wholes, unless they have the same denomination. If $\frac{1}{2}$ and $\frac{1}{3}$ are added or subtracted, the process calls for comparisons with each other and with two units—one composed of two $\frac{1}{2}$'s and the other composed of three $\frac{1}{3}$'s. In the case of unlike denominators, addition and subtraction are much more readily performed with the help of the common denominator, although it is not absolutely essential to have a common denominator, as may be illustrated by adding fractions with the help of a foot ruler used in the capacity of an abacus. Multiplication and division are again seen to be high-powered addition and subtraction, respectively. Here it is seen why the multiplication of a fraction by a fraction disturbed mathematicians for a long time; why the common denominator is not required as in addition and subtraction; why division is the inverse process of multiplication; why in the division of fractions it is permissible to invert the divisor and multiply; and why powers and roots are short ways to multiply and divide fractions. Whole numbers and fractions are seen to form two complementary systems of numbers. When these two systems are applied to the English and the metric measuring systems, including the United States monetary system, something of the multiplicity of meaningful interrelations is grasped. With the curriculum set up around such units as these, an appreciation of mathematics as a system of thought will be developed, from which will emerge the ability to make practical more of the learnings than under the older approach.

CONCLUSION

Arithmetic is changing its aims, its content, and its method. In its aim, it serves both the practical and the appreciative phases of living. In its content, it must become increasingly full and it must be reorganized. In its method, it demands an emphasis on a multiplicity of interrelations which are basic to organized thinking. Thus, as arithmetic will be taught in the near future, the teacher may look

for broader aims, richer content, greater emphasis on organization, increased usefulness for the children, and greater satisfaction on the part of the pupils.

BIBLIOGRAPHY

1. BELL, ERIC TEMPLE. *Men of Mathematics.* New York: Simon & Schuster, 1937.
2. BROWNELL, WILLIAM A. "Psychological Considerations in the Learning and the Teaching of Arithmetic," *The Teaching of Arithmetic*, pp. 1–31. Tenth Yearbook of the National Council of Teachers of Mathematics. New York: Teachers College, Columbia University, 1935.
3. BROWNELL, WILLIAM A., and CHAZAL, CHARLOTTE B. "The Effects of Premature Drill in Third-Grade Arithmetic," *Journal of Educational Research*, XXIX (September, 1935), 17–28.
4. DEMAY, AMY J. "Arithmetic Meanings," *Childhood Education*, XI (June, 1935), 408–12.
5. GRIFFIN, F. L. "Mathematics: A Tool Subject or a System of Thought?" *Mathematics Teacher*, XXX (May, 1937), 223–28.
6. GROSSNICKLE, FOSTER E. "Transfer of Knowledge of Multiplication Facts to Their Use in Long Division," *Journal of Educational Research*, XXXIX (May, 1936), 677–85.
7. HARTMANN, GEORGE W. *Gestalt Psychology.* New York: Ronald Press, 1935.
8. HOGBEN, LANCELOT. *Mathematics for the Million.* New York: W. W. Norton & Co., 1937.
9. LASHLEY, K. S. *Brain Mechanisms and Intelligence.* Chicago: University of Chicago Press, 1929.
10. METTER, HARRY L. "Trends in the Emphasis on Various Topics of Arithmetic since 1860," *Elementary School Journal*, XXXIV (June, 1934), 767–75
11. MONROE, WALTER SCOTT. *Development of Arithmetic as a School Subject.* United States Bureau of Education Bulletin No. 10, 1917.
12. MORTON, ROBERT LEE. *Teaching Arithmetic in the Elementary School*, Vol. I, Primary Grades, pp. 96–114. New York: Silver Burdett Co., 1937.
13. OVERMAN, JAMES R. *An Experimental Study of Certain Factors Affecting Transfer of Training in Arithmetic.* Educational Psychology Monographs, No. 29. Baltimore: Warwick & York, 1931.
14. RAGSDALE, CLARENCE E. *Modern Psychologies and Education*, pp. 175–77, 210. New York: Macmillan Co., 1932.
15. RUSSELL, NED M. "Arithmetical Concepts of Children," *Journal of Educational Research*, XXIX (May, 1936), 647–63.
16. SMITH, DAVID EUGENE. *The Progress of Arithmetic in the Last Quarter of a Century.* Boston: Ginn & Co., 1923.

17. SMITH, DAVID EUGENE. *The Wonderful Wonders of One-Two-Three.* New York: McFarlane, Warde, McFarlane, 1937.

18. SMITH, DAVID EUGENE, and GINSBURG, JEKUTHIEL. *Numbers and Numerals.* Contributions of Mathematics to Civilization, Monograph No. 1. New York: Teachers College, Columbia University, 1937.

19. THORNDIKE, EDWARD L. *The Fundamentals of Learning.* New York: Teachers College, Columbia University, 1932.

20. THORNDIKE, EDWARD L. *The New Methods in Arithmetic,* chap. iv. Chicago: Rand, McNally & Co., 1921.

21. VALENTINE, P. F. "There Is No Educational Psychology," *Journal of Educational Psychology,* XXVII (December, 1936), 710–12.

22. WARREN, HOWARD C. *A History of the Association Psychology.* New York: Charles Scribner's Sons, 1921.

23. WHEELER, RAYMOND H. "The New Psychology of Learning," *The Teaching of Arithmetic,* pp. 233–55. Tenth Yearbook of the National Council of Teachers of Mathematics. New York: Teachers College, Columbia University, 1935.

24. WHEELER, RAYMOND H. *Readings in Psychology.* New York: Thomas Y. Crowell Co., 1930.

25. WHEELER, RAYMOND H., and PERKINS, FRANCIS THEODORE. *Principles of Mental Development,* pp. 348–84. New York: Thomas Y. Crowell Co., 1932.

26. WILSON, GUY MITCHELL. *What Arithmetic Shall We Teach?* Boston: Houghton Mifflin Co., 1926.

27. WOODY, CLIFFORD. "Special Methods and Psychology of the Elementary-School Subjects: Arithmetic," *Review of Educational Research,* V (February, 1935), 14–30, 93–97.

SETTING A NEW PACE IN THE EDUCATION OF STUDENT TEACHERS

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How much time should be given in a teacher-education institution to student teaching? What conditions will produce the best results in student teaching? How may the philosophy and the principles of education, as set forth by the instructors of the institution, be related to the teaching principles and procedures of the demonstration school? These and other problems led to an innovation in student teaching in the State Teachers College at Trenton, New Jersey, during the school year 1937–38.

CHANGE FROM TWO-YEAR TO THREE-YEAR CURRICULUM

Until 1929 only two years of education in the kindergarten-primary and elementary fields were required for graduation from what was then the Trenton Normal School.

Based on the belief that a knowledge of methods was essential to successful teaching, the curriculum staggered under a load of methods courses, and one quarter of nine weeks was all the attention that could be given to student teaching. Because of the frequent criticisms that students were inadequately prepared, particularly in the field of subject matter, the curriculum was extended in 1929 to three years.

The revision of the courses of study made possible by the three-year curriculum resulted in a better balance between methods and subject-matter and cultural courses. The one quarter of student teaching was increased to two—one in the second year and one in the third year—each nine weeks in length. The two teaching assignments were made with a view to providing a contrast in grade level and in type of educational experience. Though this plan was a decided improvement over the two-year organization, it still fell far short of achieving provision of adequate education for teaching.

The selection of the teacher in whose charge the student was to be placed was made with careful attention to requisite qualifications. Even under the most favorable conditions, however, this teacher was more or less isolated from the general field of education by being confined to the limits of her own classroom. Expert as she might be in her own field, she was unable to open up to the student teacher the various ramifications of the general field of education. This broader conception of education, seen in the organization and administration of the entire school, is today considered essential in acquiring a fundamental philosophy of education. The young student standing at the threshold should be enabled to catch a vision of the whole process. The earlier procedures in student teaching were limited in this respect.

During the first nine weeks of student teaching, the student spent much time in the process of orientation to schoolroom procedures. Through previous observations in the demonstration school, the student had acquired some idea of procedures but was woefully lacking in ability to make suitable contacts with children and to select and to organize appropriate subject matter. Trial-and-error practices consumed much of the teaching during the first nine weeks.

The question arose: How can the student teaching be done with a maximum economy of time and a minimum waste in experimentation by students?

THE FOUR-YEAR CURRICULUM

The addition of the fourth year in 1935 was decidedly a step forward. This extra year made possible a greatly enriched curriculum in all lines, which provided a much more cultural and scientific foundation for teaching.

In an effort to ameliorate the unsatisfactory conditions of student teaching still apparent in the three-year curriculum, an entirely new plan was organized and tried out. The new plan, the practicum, was used by the kindergarten-primary group during the second quarter of the school year 1937–38, followed by one elementary group in the third quarter, and another in the fourth.

THE KINDERGARTEN-PRIMARY PRACTICUM

The practicum is a nine-weeks course given in the third, or Junior, year of the college curriculum. One of its purposes is to furnish the

student with a general overview of the whole educational process of the elementary school. The attempt is made to establish a close co-ordination between the philosophy and the principles of education, as taught in the educational department of the college, with the practices and the procedures of the elementary demonstration school in its work with children. Contacts with children are made possible by certain schoolroom activities in which the student participates.

The general objectives of the course are: (1) to present the organization of the school as a whole; (2) to give experiences in the classroom which will aid in a general understanding of the objectives of education; (3) to provide for the study of children in various learning situations; (4) to develop the ability to recognize the principles of good teaching; (5) to guide in the selection of appropriate teaching experiences, activities, and materials; (6) to provide experience in organizing and teaching units and in lesson planning; (7) to give familiarity with testing materials and methods and the use of findings; (8) to show the importance of the various types of records made in school; (9) to give some knowledge of desirable outcomes in the progress of the child through the grades; and (10) to develop professional attitudes.

The organization in its present form was developed by the collaboration of the president of the college, the head of the education department, the principal of the demonstration school, and the chairman of the kindergarten-primary curriculum. The content of this course included a study of objectives of education in general, objectives of the elementary school, and objectives of the practicum itself.

The organization was based on a study of children and a knowledge of the means employed by the school that contribute to childrens' growth and development. Various methods of child accounting were investigated, such as the use of the audiometer and of telebinocular instruments. Standardized and informal tests, records, and reports were utilized and evaluated as contributing factors in understanding the whole child. A course in child study given by an instructor of psychology paralleled the practicum, in which students had opportunities to make case studies of individual children.

Observations of lessons taught by teachers in the demonstration

school furnished excellent opportunities for directing the students' attention to children's reactions to the learning situation and also to note the place of the teacher in the selection of appropriate stimuli for desirable learnings. The observations were further enriched by conferences conducted by members of special departments in the college in connection with the special subject-matter fields. Certain periods were devoted to the general field of language arts and others to social studies, science and mathematics, music, art, health, and physical education.

Faculty members spent time in the classrooms of the demonstration school observing children and educational procedures. These contacts enabled them to be of assistance to students in relating the objectives of the general fields to specific classroom needs. Theory and practice were thus closely co-ordinated.

The general supervision of the many details of the organization was in the hands of the chairman of the kindergarten-primary curriculum, who was the co-ordinator of the course. Her work as co-ordinator required full-time attention if a smoothly running sequence of cause and effect in plans and practices was to be secured.

During the nine weeks each student carried on some special type of research in connection with problems of teaching. Some of these studies had to do with the problem of improvement of speech habits, the science program in kindergarten and Grade I, the teaching of spelling, the testing program in an elementary school, and music appreciation in the elementary grades.

Five weeks of the practicum were devoted to observations, conferences, readings, reports, and study of research problems. In the succeeding two weeks students participated in activities in certain assigned classrooms, from kindergarten to Grade IV, inclusive—the range for which they will ultimately be certificated. These two weeks provided opportunities for intimate contacts with children and close acquaintance with the organization of classroom procedures. The eighth week was spent in visits to schools of various types for the purpose of observing how other educational institutions attempt to meet their responsibilities to the children intrusted to their care. The last week of the course was used in evaluating the research studies, in synthesis, and in administering various examinations.

The specific details of the content are described in the following

sentences: (1) under the direction of the instructor in tests and measurements, students assisted in administering, marking, and evaluating standardized tests. (2) Teaching techniques were evaluated by carefully selected or developed criteria. (3) Practice was provided in writing lesson plans and a short unit of subject matter for teaching. (4) A particularly valuable experience for the students was the opportunity to observe the emphasis in the demonstration school on the teaching of science in the lower grades. This teaching is done with the co-operation of the college department of science.

The results of the practicum were checked by the following means: (1) The class prepared a rating scale by which they rated their research papers. (2) An examination covering the philosophy of the practicum was distributed in advance. Students were encouraged to discuss the topics freely. The results were very satisfactory and showed growth in ability to formulate principles and philosophy. (3) One test covered practical aspects of the practicum. (4) A test was given on the course in child study. (5) The rating scale used by the college in rating student teaching was also used by teachers in the demonstration school in evaluating the two weeks of classroom participation.

One of the noticeable results of the practicum was the growth of a very pleasant bond of friendship between students, faculty, and children. Development of poise and self-confidence became apparent in the students' classroom participation, as did also an increase in students' ability to solve problems requiring deep thinking.

NEXT STEPS

Thus far the practicum may be considered merely the first step in setting the new pace in preparation for student teaching. Succeeding steps should be built up on improved procedures, the improvement being made possible by critical evaluation of the program as a whole. Particular attention should be given to student load. Best results may be expected when schedules are planned with moderate demands on the student's time; the interest and enthusiasm with which the students enter the practicum will thereby be

continued throughout the course. The student load, however, should be so organized that there is a constant challenge to thinking.

Particular attention should be given also to the demands made on the faculty of the demonstration school. Classroom conditions should be kept as nearly normal as possible, and few extra duties should be assigned to these teachers during the practicum.

IMPROVEMENT OF INITIAL ORGANIZATION

The following suggestions are made for the improvement of the practicum: (1) Inclusion in the schedule of not more than one demonstration daily will provide adequate opportunities for conferences, readings, reports, and discussions relating to the demonstration. (2) The child study should be limited to one or two children; an analytic, detailed study of one child provides better training for the student than does a general study of many children. (3) Opportunity should be provided for the student to teach a few carefully planned lessons. While the practicum's primary purpose is not to furnish actual teaching experience, it aims to give some insight into every phase of the educational process. (4) Opportunities should be provided for many informal contacts with children in the schoolroom, the library, the playground, etc. These contacts aid students to gain understanding of the whole child. (5) Constant attention should be given to maintaining balance between theory and practice, especially in view of the changes likely to occur under changing situations.

SUMMARY AND CONCLUSIONS

The organization of the practicum as a means of improving the preparation for student teaching has many commendable features. It is a definite, detailed, comprehensive presentation of education by means of a general survey of the whole of the field. The process is vitalized to students because of the numerous firsthand experiences involved. These firsthand experiences, showing not only the importance of adequate academic preparation, but also the possibilities of pleasurable participation in the social activities of the classroom, should provide an excellent foundation for the nine weeks of responsible teaching in the Senior year. Consequently a superior quality of teaching may be expected.

SELECTED REFERENCES ON ELEMENTARY-SCHOOL INSTRUCTION

I. Curriculum, Methods of Teaching and Study and Supervision

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In this bibliography are included selected publications in the field of the elementary-school curriculum, methods of teaching and study, and supervision which appeared during the period from April 1, 1937, to March 31, 1938. Foreign-language titles are not included, and popular articles on the topics are not cited unless they present facts not generally known or an original and challenging point of view. The materials on curriculum and method deal with general aspects of these topics; studies dealing with specific subjects will be listed in subsequent issues.

Curriculum[1]

375. Bode, Boyd H. *Democracy as a Way of Life.* Kappa Delta Pi Lecture Series, No. 9. New York: Macmillan Co., 1937. Pp. xiv+114.

Discusses the development of the idea of democracy and contends that the democratic concept should penetrate not only our political life but also our economic and cultural life. The implications for education are presented.

376. Bruner, Herbert B. "Some Requirements of the Elementary School Curriculum," *Teachers College Record*, XXXIX (January, 1938), 273–86.

Discusses eleven major requirements to be met by the elementary-school curriculum. These stress the social aspects of education.

[1] See also Item 588 (Craig) in the list of selected references appearing in the November, 1937, number of the *Elementary School Journal;* Item 36 (Otto and Hamrin) in the January, 1938, number of the *Elementary School Journal;* Items 169 (Gray, Freeman, and Brownell) and 171 (Harap) in the April, 1938, number of the *Elementary School Journal;* Item 347 (Bason) in the June, 1938, number of the *Elementary School Journal;* Items 15 (Frederick and Farquear), 16 (Harap), 18 (Hopkins), and 22 (Judd) in the January, 1938, number of the *School Review;* and Item 441 in the September, 1938, number of the *School Review.*

377. CASWELL, HOLLIS L. "Social Understanding and the School Curriculum," *Teachers College Record*, XXXIX (January, 1938), 315–27.

A discussion of problems incidental to the issue of the "responsibility of the school for developing the ability [of pupils] to co-operate in the solution of current problems."

378. CONNER, JAY D. "Curriculum Collects from Community," *Childhood Education*, XIV (February, 1938), 256–60.

Discusses the necessity of relating the work of the school closely to the needs of the community and describes sources of curriculum materials to be found in the locality.

379. "Curriculum Construction," *Journal of Experimental Education*, V (June, 1937), 327–468.

This number consists of nine articles dealing with various aspects of curriculum construction.

380. EVERETT, S. (Editor). *The Community School.* Society for Curriculum Study, Committee on the Community School. New York: D. Appleton-Century Co., Inc., 1938. Pp. xii+488.

Discusses the relations between the public schools and the areas that they serve, with emphasis on the need of exploring and using local resources to vitalize instruction. A number of programs of community schools are described.

381. FEATHERSTONE, W. B. "An 'Experience-Curriculum' for Slow Learners at Public School 500: Speyer School," *Teachers College Record*, XXXIX (January, 1938), 287–95.

A general discussion of the contents of a "modified experience curriculum" being experimented with at the Speyer School in New York City. Several illustrative units are described.

382. FREDERICK, O. I., and PATTERSON, D. R. "The Mississippi Curriculum Program," *Curriculum Journal*, VIII (October, 1937), 239–44.

Describes nine major steps followed in developing the curriculum program in Mississippi and the plan of curriculum organization resulting.

383. HAYWARD, W. GEORGE, and ORDWAY, NANCY M. "Vocabularies of Recently Published Preprimers," *Elementary School Journal*, XXXVII (April, 1937), 608–17.

An analysis of the vocabularies of fifteen preprimers, including a combined vocabulary of 350 words.

384. HOLLINGWORTH, LETA S. "An Enrichment Curriculum for Rapid Learners at Public School 500: Speyer School," *Teachers College Record*, XXXIX (January, 1938), 296–306.

Discusses the principles underlying the selection of a theme, "the evolution of common things," as a basis of selecting units for pupils with intelligence quotients of over 130. Illustrations of the application of this theme are included.

385. *Improving Social Studies Instruction.* Research Bulletin of the National Education Association, Vol. XV, No. 5. Washington: Research Division of the National Education Association, 1937. Pp. 185–258.

Describes the results of a questionnaire study of practices of teachers of "recognized ability" in city school systems. Reports their judgments concerning items selected for the social-studies curriculum, courses of study, methods and aids in teaching, and controversial issues.

386. KRONENBERG, HENRY. "Social Studies in the New Curriculum," *Social Education*, I (May, 1937), 344–50.

A discussion of the differences found in the core curriculums in the social studies which have been developed in a number of states and of the kinds of materials to be used to supplement the core curriculum.

387. LAMSON, EDNA E. "To What Extent Are Intelligence Quotients Increased by Children Who Participate in a Rich Vital School Curriculum?" *Journal of Educational Psychology*, XXIX (January, 1938), 67–70.

Reports no significant change in intelligence quotients of 141 fourth-grade pupils as the result of experience in an enriched curriculum during a range of years.

388. LAPORTE, WILLIAM RALPH (Compiler). *The Physical Education Curriculum.* Sponsored by the College Physical Education Association. Los Angeles, California: Caslon Printing Co., 1937. Pp. 62.

Suggests an arrangement of the curriculum based on judgments of a large number of persons on the selection, the gradation, and the classification of physical-education activities.

389. OBERHOLTZER, EDISON ELLSWORTH. *An Integrated Curriculum in Practice.* Teachers College Contributions to Education, No. 694. New York: Teachers College, Columbia University, 1937. Pp. xvi+218.

A detailed description of the development, the installation, and the appraisal of an "integrated" curriculum in the elementary grades of Houston, Texas.

390. SCHAEFFER, GRACE C. "An Informational Unit on Time," *Elementary School Journal*, XXXVIII (October, 1937), 114–17.

Describes a plan for developing units in social arithmetic which stress informational, sociological, and psychological functions of arithmetic.

391. SLESINGER, ZALMEN. *Education and the Class Struggle.* New York: Covici-Friede, 1937. Pp. viii+312.

A critical review of current conceptions of the relation of the school and the changing social order and a presentation of the view that education should prepare its pupils to engage in what the author regards as an inevitable class struggle.

392. TANKE, CARL. "Judicial Decisions on Curriculum Content," *Curriculum Journal*, VIII (December, 1937), 349–54.

A citation and a review of sixty-seven decisions made by federal and state courts of final jurisdiction with respect to issues of a secular nature.

393. WASHBURNE, CARLETON, and MORPHETT, MABEL VOGEL. "Grade Placement of Children's Books," *Elementary School Journal*, XXXVIII (January, 1938), 355–64.

Describes a formula for finding the reading difficulty of children's books and applies the formula to one book.

394. WELLS, H. G. "The Informative Content of Education," *School and Society*, XLVI (September 4, 1937), 289–300.

The author believes that the important function of education is to impart authentic information to the pupil, to give him "a complete framework of knowledge." At the same time, Wells recognizes the great value of the "non-informative" aspects of instruction.

METHODS OF TEACHING AND STUDY[1]

395. CROW, CHARLES SUMNER. *Creative Education*. New York: Prentice-Hall, Inc., 1937. Pp. xxvi+456.

Presents a series of eight "cycles of experience in creative learning," discusses their relation to teaching procedures, and suggests certain problems that arise.

396. EAMES, THOMAS HARRISON. "A Study of the Speed of Word Recognition," *Journal of Educational Research*, XXXI (November, 1937), 181–87.

Compares the speed of word recognition by groups of pupils with and without reading disability and discusses the effectiveness of certain remedial treatment.

397. GRAY, H. A. "Audio-visual Learning Aids for the Primary Grades," *Elementary School Journal*, XXXVIII (March, 1938), 509–17.

A discussion of the preparation and the use of sound-film materials.

398. HILLIARD, GEORGE H., and TROXELL, ELEANOR. "Informational Background as a Factor in Reading Readiness and Reading Progress," *Elementary School Journal*, XXXVIII (December, 1937), 255–63.

Demonstrates the difficulties that arise in learning to read because of variations in social background and shows the necessity of enriching and broadening children's backgrounds in the primary grades.

399. NETZER, R. F. "The Evaluation of a Technique for Measuring Improvement in Oral Composition," *Journal of Experimental Education*, VI (September, 1937), 35–39.

Describes a method of measuring improvement in oral composition and presents data showing growth in this ability for a small number of cases. A pioneer study.

[1] See also Item 445 (Cuff) in the list of selected references appearing in the October, 1937, number of the *Elementary School Journal;* Item 578 (Williams and Whitaker) in the November, 1937, number of the *Elementary School Journal;* Item 223 (Tucker) in the May, 1938, number of the *Elementary School Journal;* Item 42 (Wynne) in the January, 1938, number of the *School Review;* and Items 356 (Burt) and 368 (Tiegs) in the May, 1938, number of the *School Review*.

400. PINTNER, RUDOLF, and ARSENIAN, SETH. "The Relation of Bilingualism to Verbal Intelligence and School Adjustment," *Journal of Educational Research*, XXXI (December, 1937), 255–63.

Concludes that bilingualism in the particular population studied bears no relation to intelligence nor to school adjustment.

401. SCATES, DOUGLAS E. "What Can Research Contribute to Our Understanding of the Physically Handicapped?" *Journal of Educational Research*, XXXI (September, 1937), 20–28.

Discusses nineteen areas of study about the characteristics and the treatment of physically handicapped children. Suggests problems that should be further investigated.

402. SCHMIDT, C. C. *Teaching and Learning the Common Branches*. New York: D. Appleton–Century Co., Inc., 1938 (revised). Pp. 468.

A general discussion of methods of teaching in the major elements of the elementary-school curriculum.

403. SNEDAKER, MABEL. "Interest and Efficiency in Reading," *Social Education*, I (December, 1937), 644–51.

An excellent overview of principles and procedures for increasing reading efficiency in content subjects. The article contains numerous specific suggestions for applying these principles.

404. STOUT, HUMBERT G. "Variations of Normal Children," *Journal of Experimental Education*, VI (September, 1937), 84–100.

Reports data concerning variations in physical, social, educational, and emotional traits of normal children. Great individual differences are shown to exist. The need of individualized instruction is emphasized.

405. THOMAS, M. E. *An Inquiry into the Relative Efficacy of Broadcast and Classroom Lessons*. Australian Council for Educational Research Series, No. 48. Melbourne, Australia: Melbourne University Press, 1937. Pp. 48.

Reports no significant differences in the effectiveness of broadcast and oral lessons in English, nature-study, arithmetic, and history in the middle grades. Obtained differences favor somewhat the oral method.

406. THORNDIKE, EDWARD L. *The Teaching of Controversial Subjects*. The Inglis Lecture, 1937. Cambridge, Massachusetts: Harvard University Press, 1937. Pp. 40.

A critical analysis of the positions of those who argue for or against the practice. Emphasizes the application of the methods of science in the consideration of controversial issues.

407. THORNDIKE, E. L., and LORGE, IRVING. "Ignorance and Prejudice concerning Economics and Business," *School and Society*, XLV (April 24, 1937), 589–92.

Results of a test of knowledge concerning simple economics and business show the ineffectiveness of the present arithmetic curriculum. Prejudices on economic problems are "immune to intelligence and almost immune to academic knowledge of economics."

408. TIDYMAN, WILLARD F. *Directing Learning through Class Management.* New York: Farrar & Rinehart, Inc., 1937. Pp. viii+540.

Discusses in detail eighteen major aspects of classroom management which, in the author's judgment, are distinct from problems in general methods of teaching.

409. *What Does Research Say?* Bulletin No. 308. Lansing, Michigan: State Department of Public Instruction, 1937. Pp. 146.

A digest of the contributions of educational research to various aspects of elementary education. Prepared by a group of specialists.

SUPERVISION[1]

410. *Appraising the Elementary-School Program.* Sixteenth Yearbook of the Department of Elementary School Principals. Bulletin of the Department of Elementary School Principals, Vol. XVI, No. 6. Washington: Department of Elementary School Principals of the National Education Association, 1937. Pp. 227–656.

A comprehensive discussion of means of appraising school organization, administrative and supervisory procedures, the curriculum, methods of learning and teaching, socializing experiences, pupil progress, efficiency of teaching, and school equipment.

411. BARR, A. S. "Educational Research and the Field Worker," *Journal of Educational Research*, XXXI (September, 1937), 1–8.

Discusses the field worker as a producer and a consumer of research and the values and the limitations of the findings of the research of the field worker.

412. BRUNER, HERBERT B. "Criteria for Evaluating Course-of-Study Materials," *Teachers College Record*, XXXIX (November, 1937), 107–20.

Discusses a revision of the Stratemeyer-Bruner Criteria for the Evaluation of Courses of Study and presents a summary of data describing the results of the application of the scale to a large number of courses of study.

413. CHAMBERS, M. M. "Co-ordinating Education and Recreation," *School and Society*, XLVI (November 6, 1937), 577–82.

An excellent presentation of issues relating to the problems growing out of the need of improving the recreation of a community and of the function of the school in such an enterprise.

[1] See also Item 593 (Frutchey) in the list of selected references appearing in the November, 1937, number of the *Elementary School Journal;* Items 28 (Akridge) and 34 (McGaughy) in the January, 1938, number of the *Elementary School Journal;* Item 202 (Doll and McKay) in the May, 1938, number of the *Elementary School Journal;* Item 113 (Knowlton) in the February, 1938, number of the *School Review;* and Item 452 (Flory and Webb) in the September, 1938, number of the *School Review.*

414. COURTIS, S. A. "Of the Children, by the Children, for the Children," *Childhood Education*, XIV (November, 1937), 101–5.

Discusses the steps to be taken for making effective, in both administration and instruction, the ideals embodied in the democratic view of life.

415. DAVIS, ROBERT A. "The Adaptability of Psychological Techniques to the Study of Schoolroom Learning," *Journal of Educational Research*, XXX (May, 1937), 663–71.

Describes in some detail procedures to be used in classroom experimentation and suggests a series of problems to be investigated in the field of learning.

416. JOHNSON, WILLIAM H. "Adjustment Teacher Service in the Chicago Elementary Schools," *Elementary School Journal*, XXXVIII (December, 1937), 264–71.

Describes a plan of studying the mental, social, educational, and physical equipment of pupils so that the work of the school can be effectively adapted to individual needs.

417. JUDD, CHARLES H. "Can Divergent Views on Educational Theory and Practice Be Reconciled?" *Elementary School Journal*, XXXVII (April, 1937), 576–91.

Discusses the present chaotic situation relative to views on methods of teaching, curriculum organization, and educational practices and makes a plea for experimentation to establish valid bases of procedure.

418. LOUISIANA STATE DEPARTMENT OF EDUCATION. *Louisiana Program for the Improvement of Instruction.* Bulletin No. 351. Baton Rouge, Louisiana: State Department of Education, 1937. Pp. 250.

A discussion of the plan for improving the effectiveness of instruction on the basis of the state program of curriculum development.

419. MCCALL, WILLIAM A., HERRING, JOHN P., and LOFTUS, JOHN J. "Measuring the Amount of Activity Education in Activity and Control Schools in New York City," *Teachers College Record*, XXXIX (December, 1937), 230–40.

Describes the development and the application of a "School Practices Questionnaire" which can be used as a test of the kinds of activities carried on by a school. The test deals with twenty kinds of activities.

420. MONROE, WALTER S. "Progress toward a Science of Education," *School and Society*, XLV (May 8, 1937), 633–39.

Discusses the historical development of the scientific movement in education and its effects on current programs. The necessity for a comprehensive evaluation, synthesis, and interpretation of research findings is pointed out.

421. MORT, PAUL R., and CORNELL, FRANCIS G. *A Guide for Self-Appraisal of School Systems.* New York: Teachers College, Columbia University, 1937. Pp. vi+66.

Contains check lists for appraising classroom instruction, the curriculum, special services for individual pupils, educational leadership, and physical facilities.

422. PARSONS, ROSA F., and MODEROW, GERTRUDE G. "The Extent and Nature of Public-School Testing Programs in City School Systems," *Educational Administration and Supervision*, XXIII (September, 1937), 461–72.

Reports the results of a questionnaire study of the testing programs of fifty-three cities with populations of more than eighteen thousand.

423. RIDLEY, CLARENCE E., SIMON, HERBERT A., and RYBCZYNSKI, HENRIETTA. "Measuring Public Education," *Public Management*, XX (February, 1938), 41–45.

A stimulating discussion of new trends in methods of evaluating the effectiveness of the educational program. Emphasizes the importance of measures of the educational product and the need of considering the school as one element of a total community educational program.

424. SCATES, DOUGLAS E., and HOBAN, CHARLES F., JR. "Critical Questions for the Evaluation of Research," *Journal of Educational Research*, XXXI (December, 1937), 241–54.

Discusses a series of ten questions to be considered in the evaluation of any research study. A valuable guide for supervisors.

425. *The Scientific Movement in Education.* Thirty-seventh Yearbook of the National Society for the Study of Education, Part II. Bloomington, Illinois: Public School Publishing Co., 1938. Pp. xii+530.

A comprehensive overview of the contributions of the scientific study of education to the general advancement of education and to scientific knowledge in particular fields.

426. *Teachers and Co-operation.* Issued by the Committee in Charge of the Yearbook on Co-operation of the Department of Supervisors and Directors of Instruction of the National Education Association. Ann Arbor, Michigan: S. A. Courtis (% University of Michigan), 1937. Pp. 80.

An analysis of co-operation and means of teaching co-operation and a description of ten types of specific techniques.

427. TINKER, MILES A. "Facts concerning Hygienic Illumination Intensities," *School and Society*, XLVII (January 22, 1938), 120–21.

Criticizes certain published studies dealing with the issue and presents what the author believes to be established facts concerning illumination intensities suitable for reading and other types of activity.

428. WOOD, HUGH B. "Planning a Program of Evaluation," *Curriculum Journal*, VIII (December, 1937), 355–59.

Discusses a series of six principles suggesting the relation of appraisal to the total educational program and outlines the major steps to be followed in an evaluation program.

Educational Writings

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REVIEWS AND BOOK NOTES

AN IMPORTANT BOOK ON PRIMARY ARITHMETIC.—Ever since its publication in 1927 Morton's *Teaching Arithmetic in the Primary Grades* has been more widely used in teacher-education classes than any other textbook in the field. It is probably no exaggeration, then, to say that during the past decade this book has been as important a factor as any other in setting the pattern of number instruction in the primary grades. On this account the appearance of another textbook by Morton[1] is a matter of no little interest.

The last ten years have witnessed far-reaching changes in both the theoretical and the practical aspects of number instruction in the primary grades. No more concrete evidence of these changes is to be found than that furnished by a comparison of Morton's 1927 and 1937 books, for in both instances the author tried to record faithfully the best thought on the subject. In his Preface, Morton relates that he started work on the second book in 1934 or 1935 with the prospect of early completion. He soon became convinced, however, that no mere revision of the older book would serve his purpose. For one thing, his conception of primary arithmetic was not what it had been in 1927; for another, he could not in a revision recognize the wealth of relevant new research; and, for still another, he deemed imperative a more extended treatment of certain topics. As a consequence more than 90 per cent of the 1937 book is "new material or material which has been completely rewritten" (p. iii).

The extent of the rewriting will not be apparent upon casual inspection. The titles of nine of the twelve chapters in the new book bear close resemblance to corresponding titles in its predecessor. Still, even on this faulty basis of comparison one encounters two wholly new chapters (chapter i, "Developing an Understanding of Number," and chapter ii, "The Place of Arithmetic in the Curriculum of the Primary Grades") and one greatly expanded chapter on "Roman Numerals, Measures, Fractions."

When one begins to read the 1937 book, one finds on every hand evidences of changes in point of view and in recommended practices. There is new emphasis on the importance of children's understanding the meaning and the social significance of what they learn. To this end helpful devices are offered for teaching the meaning of numbers, the number system, the fundamental processes,

[1] Robert Lee Morton, *Teaching Arithmetic in the Elementary School:* Vol. I, Primary Grades. New York: Silver Burdett Co., 1937. Pp. x+410. $2.40.

etc. The activity program as it applies to primary number is considered and found wanting. Instead, systematic instruction from the beginning of Grade I is favored, but a kind of systematic instruction which is a far cry from the dull, useless, unintelligible, abstract arithmetic of an earlier day.

The whole treatment gains effectiveness from the way in which the author makes his points. Teachers and teachers in preparation will welcome the clarity and the simplicity of the treatment, as they will also the study aids at the ends of the chapters: "Questions and Review Exercises" (averaging twenty-three to a chapter), "Chapter Tests" (averaging twenty-seven objective questions), and the carefully selected annotated reading lists (about twelve references to a chapter). The almost simultaneous appearance of Morton's new textbook and of Wheat's *The Psychology and Teaching of Arithmetic* may some day be reckoned as marking the beginning of a new day in number instruction in the primary grades.

WILLIAM A. BROWNELL

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THE SCHOOL IN SOCIETY.—Human institutions, like human beings, not only struggle to achieve certain ends but are constrained to exert continual effort to preserve their very existence. Public education in recent years has, with unexpected vividness, come face to face with this primordial reality. Educators have been forced to grapple with what they have considered nonprofessional problems. Resenting the interruption and not sensing the basic significance of the phenomenon, they have looked forward to an early redirection of their energies back into accustomed channels, although some have seen a new vision.

Our experiences with stark economic and social forces have come at a time when another movement may carry forward and preserve the lessons which should be learned. The years of the present century have seen an ever growing emphasis on socialization in education. First it was the child that received the emphasis; more recently it has been the entire school. Progress is made from the "socialized recitation" to a true "community school." The ideal is a more perfect integration of the school and society.

As a part of this movement and as a contribution to it, Moehlman has produced his latest book,[1] in which he presents the active interrelations of school and society in broad terms. The school, as an institution created by a democratic state to facilitate a social purpose, faces the internal danger of shifting emphasis from a vitalizing purpose to an undue concern over the preservation of existing structures and the external danger of lack of community confidence and support. Institutional hygiene requires a wholesome and continuous interaction between the parent society and the dependent—even if

[1] Arthur B. Moehlman, *Social Interpretation: Principles and Practices of Community and Public-School Interpretation.* New York: D. Appleton-Century Co., Inc., 1938. Pp. xiv+486. $3.00.

professional—organization. Opportunities and procedures for maintaining this exchange of insights, attitudes, and purposes occupy the large portion of the book.

The ideology of the book may be suggested by a selection of scattered statements.

The democratic state is characterized by tremendous diversity in interests and beliefs [p. 8].

The public school . . . . cannot operate much in advance of . . . . public opinion [p. 52].

. . . . the two-phase activity of social interpretation—understanding of the community by the institution and understanding of the institution by the community. Social interpretation is all-inclusive and carries within it the phase of public relations and the activity of publicity. . . . . The methods of social interpretation are the extension of the laws of learning to adult education [p. 115].

It is obvious that a social-interpretation program cannot be built successfully overnight [p. 137].

[Time] is a definite essential in the development of fundamental confidence in both institution and personnel [p. 205].

The principal's job includes . . . . the location, reporting, analysis, and elimination of trouble spots [p. 227].

As the most important agent in the interpretative process the teacher is responsible for work in many fields. The final degree of success will be determined by the effectiveness of teaching [p. 245].

The partnership concept of American public education may be translated more completely in practice by the organization and use of lay interest groups [p. 356].

The strength of the school is in the minds of the people and not in the front page of the newspaper [p. 406].

This volume is no superficial treatise on the latest publicity devices. It is not a narrowly conceived explanation of techniques of obtaining votes. It is, however, practical as well as philosophical; it offers definite suggestions—if not for tomorrow's work, for next month's. It is a foundational setting for the entire field of institutional-societal relationships—an interpretation of the reciprocal obligation of each group to the other. A person can scarcely peruse any portion of the book without feeling that his thinking has been broadened and his perspective given added dimensions. Just as the reader's concern is raised from the realm of petty advantage to the level of long-time goals to be sought by ethical and professional means, so the whole practice of public relations should be brought nearer its true function by the interpretation presented in this book.

DOUGLAS E. SCATES

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SCHOOL FINANCE FOR LAYMEN AND STUDENTS.—In a little book of about two hundred pages,[1] Mort and his colleagues present, for the service of students in

[1] Frank W. Cyr, Arvid J. Burke, and Paul R. Mort, *Paying for Our Public Schools*. Scranton, Pennsylvania: International Textbook Co., 1938. Pp. x+198. $2.00.

introductory courses and of laymen and school-board members, the Teachers College concept of public-school finance. The book is fairly comprehensive as to topics covered, reliable as to facts, and succinct and readable in style. The straightforward and interestingly written text is clarified by graphs, cartoons, and drawings and is followed by a fairly extensive bibliography. It is legibly printed on excellent paper and is conveniently and attractively bound. The publishers as well as the authors have done well by this book.

The authors state their theme as follows: "The public demands more and better public schools, while asking for fewer and lower taxes. What are we to do?" (P. 8.) Among the problems which are considered in the attempt to offer an answer are: inequalities in existing educational offerings resulting from the present inefficient district system of support and control; increased demands for secondary education; variations in the educational ideals and abilities of the several states; antiquity and incompetency of current tax systems in the states; inequalities in the distribution of state and federal funds to local educational units; and, of course, the accentuation of these and other difficulties by the economic depression. These problems form the background for constructive discussions and suggestions.

The authors conclude that present tax sources are insufficient to provide equitably for the educational service that the public wants. "Means must be found elsewhere. Can they be found?" (P. 61.) In answer, it is argued that the nation has sufficient capacity for economic production but lacks "the financial machinery for transferring to the support of schools the goods and services produced" (p. 75). The finances can be found if the public is "led to value education properly." Having reached this conclusion, the book in its remaining chapters is mostly a simplified exposition of the plans for raising and distributing school money which are already associated with the name of Mort.

Perhaps the chief criticism to be offered of the book is that it is too restricted in scope and, consequently, fails to exhibit different schools of thought and points of view. The bibliography is especially weighted with references to studies emanating from a single center of research activity. Doubtless the authors' response would be that they intended nothing else. In fairness to general readers, however, it might have been well for them to state this limitation explicitly.

So far as the reviewer's knowledge goes, the book is unique, not only in the literature of school finance, but in that of other aspects of public education. There is room for more publications like it. It attempts, successfully, to combine a service to students whose interest in school finance is general rather than highly professional with a service to intelligent laymen. Some such project in the field of the school curriculum would help to fill another current need.

B. F. PITTENGER

University of Texas

PROGRESSIVES AT THE PARTING OF THE WAYS.—For a generation supporters of the so-called "progressive" movement in education have continued in action and appealed for support. Until the period of the depression their gains were relatively modest in extent. During that period, however, they enjoyed their greatest prosperity, as might be expected, for education is a social process and was naturally involved in the general demand for social reform. Resistance to the progressives has, however, steadily increased as they have advanced until, as Dewey has recently admitted, the signs of a reaction are already in evidence.

The nature of the reaction to the movement is well exemplified in Bode's latest book.[1] The author talks as a loving father to an errant child. Here is a competent philosopher who believes that the pragmatism to which he and the progressives are devoted offers the foundation for a program of democratic education but who denies that the present leaders of the progressive movement have succeeded in outlining that program.

The nature of Bode's criticisms can be inferred from the following statements scattered through his book.

As was perhaps to be expected, it [the progressive movement] has also led to various aberrations and errors [p. 3].

It [progressive education] has nurtured the pathetic hope that it could find out how to educate by relying on such notions as interests, needs, growth, and freedom [p. 40].

And the irony of it all is that, in this one-sided devotion to the child, it has betrayed the child and deprived him of his birthright [p. 57].

It is no accident that progressive education has made no conspicuous achievements on the level of adolescent youth [p. 58].

At any rate, progressive education may reasonably be expected, after a career of some thirty years, to have something more than the metaphor of growth to go by [pp. 83–84].

To raise a hue and cry against subjects is to pour out the baby with the bath [p. 96].

It is the lack of an adequate social ideal that has burdened the progressive movement with a heavy load of trivialities and errors [p. 113].

The arguments by which these criticisms are justified will not be considered here, nor the author's strictures on educational planners who deny the validity of the pragmatic foundation for a program of education. It will be enough to report his general conclusions, which are based on an analysis that everywhere betrays a sympathetic understanding of the problems.

FREDERICK S. BREED

University of Chicago

SELF-HELP FOR YOUNG READERS.—A book[2] which successfully dramatizes the skill of reading is described by the author as "a book for everyone, young

[1] Boyd H. Bode, *Progressive Education at the Crossroads*. New York: Newson & Co., 1938. Pp. 128. $1.00.

[2] Carol Hovious, *Flying the Printways: Experience through Reading*, pp. xii+526, $1.40; *Test Book for "Flying the Printways" and Key to Tests*, pp. 16, $0.10. Boston: D. C. Heath & Co., 1938.

or old, rich or poor, who would read with greater speed, accuracy, and intelligence" (p. v). The style of presentation and the nature of the reading selections, however, point the book rather definitely toward readers of the junior high school age.

From the first page to the last a strong bid for interest is apparent. Vital analogies characterize the discussion; striking phrases enliven the style; and the lines are packed with action and movement. The author deals with such fundamental problems as comprehension, speech, vocabulary, finding main ideas, and discovering a writer's plan. Word study recurs frequently and consistently throughout the book under varying and attractive captions. The reader will find an abundance of tests for self-checking and a liberal assortment of reading selections which are compelling in interest.

The critical question which arises in one's mind is: To what extent can isolated and specialized drill in reading solve the problems of the pupil who is having difficulty in assimilating the reading assignments in his various content courses? Undoubtedly the exercises in this book afford basic and developmental practice, but the rest of the journey along the "printways" may require some careful counseling and guidance on the part of teachers of geography, history, literature, and other content subjects. In other words, successful guidance in reading may not be a one-teacher task, a one-course task, or a one-book task, but a co-operative undertaking involving all the teachers of all the subjects.

Another question which will inevitably arise from reading *Flying the Printways* is: How does the nature of the content influence performance in reading? The author has skilfully selected readings which grip the interest of adolescents. The very phrases often cudgel the attention into submission. Take, for example, the following dramatic sentences: "Tensely, three men waited behind their thin screen of tall jungle grasses, not daring to make a sound. One false move might mean death. On the other side of the flimsy screen, not fifteen feet away, prowled a tiger—a fierce, wild tiger of the Indian jungles" (p. 102). Would not more effective training result from utilizing readings which represent a cross-section of a pupil's actual reading experience?

These queries, however, must not be allowed to detract seriously from the essential achievement of the book: a presentation of reading as an intellectual process which is subject to mastery through systematic effort toward self-development.

ROY IVAN JOHNSON

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Columbia, Missouri

A SINGLE-CYCLE SERIES IN HISTORY.—The Barker-Grimm-Hughes series[1] includes three books: the first, treating the period from primitive man to the

[1] Eugene C. Barker, Mabel Rockwood Grimm, and Matilda Hughes, *The Story of Earliest Times*, pp. viii+360; *The Story of Old Europe and New America*, pp. viii+404;

time of Justinian; the second, Europe from the time of Charlemagne to the great explorations, with some emphasis on early Spanish, French, and English colonization in the New World; and the third, Colonial history from the founding of Jamestown to the close of the Revolutionary War.

The first volume consists of some fifty stories (chapters) grouped into four parts: "What People Learned before They Could Write," "How People Lived while Writing Was Being Invented," etc. Each part, in turn, is divided into units (twelve in all), those for the second part being: "Where People First Learned To Write" and "People Who Learned Writing from Egypt." Continuity is promoted by introductory discussions for each part and unit, as well as by summarizing activities for the units. In the case of certain units, fictitious characters are introduced, and their experiences are related in a series of stories. The last two volumes are similar in organization except that the number of units in each case is six and the number of chapters is about a third that of the first book. Appropriate extracts from poems and sources are introduced, but the use of fictionalized episodes is avoided.

The authors have been successful in writing interestingly for children in the intermediate grades. The vocabulary has been checked against the Thorndike list of words used by children, the basic vocabulary being limited to the first four thousand words for the first book with an additional one thousand words allowed for each succeeding volume. Equally important is it that the sentences are short, the presentation is clear, and abstract topics are eliminated. The emphasis is on everyday things: clothes, houses, food, farming, travel, communication, amusements, etc. Carefully selected extensive readings are suggested for each unit as are activities of various kinds. Of the latter, the "Then and Now" comparisons and the summarizing activities seem especially valuable.

All the books contain an abundance of visual aids: time lines, maps, and pictures. The first-named should perhaps be called "charts" rather than "time lines," since the latter term presupposes that they are constructed to scale and even a casual examination reveals that these are not. A similar criticism may be made of the maps. In no case is a scale of miles provided, and often the proportions are obviously distorted. Certainly the Italian Peninsula never had the width represented in the map on page 289 in the first book, nor does it seem likely that in Colonial times the distance from Jamaica to Rhode Island was more than 25 per cent greater than the distance from Rhode Island to Africa, as indicated on the map on page 288 in the third volume. All the books contain a great number of colored pictures. One misses photographic reproductions of relics and remains, which, after all, add to the child's appreciation of reality.

HOWARD R. ANDERSON

Cornell University and Ithaca Public Schools

The Story of Colonial Times, pp. viii+424. Evanston, Illinois: Row, Peterson & Co., 1936 and 1937.

CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

Art Education Today: An Annual Devoted to the Problems of Art Education. Sponsored by Members of the Fine Arts Staff of Teachers College. New York: Teachers College, Columbia University, 1938. Pp. 134. $1.25.

BELL, HOWARD M. *Youth Tell Their Story:* A Study of the Conditions and Attitudes of Young People in Maryland between the Ages of 16 and 24. Conducted for the American Youth Commission. Washington: American Council on Education, 1938. Pp. 274. $1.50.

BRIGGS, THOMAS H. *Improving Instruction: Supervision by Principals of Secondary Schools.* New York: Macmillan Co., 1938. Pp. x+588. $2.50.

COULBOURN, JOHN. *Selection of Teachers in Large City School Systems.* Teachers College Contributions to Education, No. 740. New York: Teachers College, Columbia University, 1938. Pp. x+178. $1.85.

COX, PHILIP W. L., and DUFF, JOHN CARR. *Guidance by the Classroom Teacher.* New York: Prentice-Hall, Inc., 1938. Pp. xxvi+536. $3.00.

DEARBORN, WALTER F., ROTHNEY, JOHN W. M., and SHUTTLEWORTH, FRANK K. *Data on the Growth of Public School Children (From the Materials of the Harvard Growth Study).* Monographs of the Society for Research in Child Development, Vol. III, No. 1 (Serial No. 14). Washington: Society for Research in Child Development, National Research Council, 1938. Pp. 136.

DIXON, C. MADELEINE. *High, Wide, and Deep: Discovering the Preschool Child.* New York: John Day Co., 1938. Pp. xx+300. $3.00.

FREDERICK, ROBERT W., RAGSDALE, CLARENCE E., and SALISBURY, RACHEL. *Directing Learning.* New York: D. Appleton–Century Co., Inc., 1938. Pp. xvi+528. $2.75.

GELLERMANN, WILLIAM. *The American Legion as Educator.* Teachers College Contributions to Education, No. 743. New York: Teachers College, Columbia University, 1938. Pp. x+280. $3.15.

GREULICH, WILLIAM WALTER; DAY, HARRY G.; LACHMAN, SANDER E.; WOLFE, JOHN B.; and SHUTTLEWORTH, FRANK K. *A Handbook of Methods for the Study of Adolescent Children.* Monographs of the Society for Research in Child Development, Vol. III, No. 2 (Serial No. 15). Washington: Society for Research in Child Development, National Research Council, 1938. Pp. xviii+406.

HARTOG, SIR PHILIP, with the assistance of GLADYS ROBERTS. *A Conspectus of Examinations in Great Britain and Northern Ireland.* International Institute Examinations Enquiry. London, England: Macmillan & Co., 1937. Pp. xiv +182.

HAYGOOD, WILLIAM CONVERSE. *Who Uses the Public Library: A Survey of the Patrons of the Circulation and Reference Departments of the New York Public*

Library. University of Chicago Studies in Library Science. Chicago: University of Chicago Press, 1938. Pp. xx+138. $2.00.

HUSSEY, MARGUERITE M. *Teaching for Health*. New York: New York University Bookstore (18 Washington Place), 1938. Pp. xiv+312. $2.75.

JONES, ARTHUR J. *The Education of Youth for Leadership*. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xx+246. $2.00.

KREY, A. C. *A Regional Program for the Social Studies*. New York: Macmillan Co., 1938. Pp. xiv+140. $1.25.

LLOYD-JONES, ESTHER MCD., and SMITH, MARGARET RUTH. *A Student Personnel Program for Higher Education*. New York: McGraw-Hill Book Co., Inc., 1938. Pp. x+322. $2.75.

MORT, PAUL R., and CORNELL, FRANCIS G. *Adaptability of Public School Systems*. New York: Teachers College, Columbia University, 1938. Pp. xii+146. $2.10.

MORTON, ROBERT LEE. *Teaching Arithmetic in the Elementary School:* Vol. II, Intermediate Grades. New York: Silver Burdett Co., 1938. Pp. xii+538. $2.72.

O'CONNOR, ZENA C. *The Runaway Boy in the Correctional School*. Teachers College Contributions to Education, No. 742. New York: Teachers College, Columbia University, 1938. Pp. viii+78. $1.60.

PATTY, WILLIAM L. *A Study of Mechanism in Education: An Examination of the Curriculum-making Devices of Franklin Bobbitt, W. W. Charters, and C. C. Peters from the Point of View of Relativistic Pragmatism*. Teachers College Contributions to Education, No. 739. New York: Teachers College, Columbia University, 1938. Pp. vi+184. $1.85.

ROSENBLATT, LOUISE M., for the COMMISSION ON HUMAN RELATIONS. *Literature as Exploration*. A Publication of the Progressive Education Association. New York: D. Appleton-Century Co., Inc., 1938. Pp. xiv+340. $2.25.

RYAN, W. CARSON. *Mental Health through Education*. New York: Commonwealth Fund, 1938. Pp. viii+316. $1.50.

SANFORD, CHESTER M. *Developing Teacher Personality That Wins*. Evanston, Illinois: Row, Peterson & Co., 1938. Pp. 160. $1.60.

SEARS, JESSE B. *City School Administrative Controls: An Analysis of the Nature, Placement and Flow of Authority and Responsibility in the Management of a City School System*. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xviii+282. $2.50.

SHEATS, PAUL H. *Education and the Quest for a Middle Way*. New York: Macmillan Co., 1938. Pp. x+190. $1.25.

SHUTTLEWORTH, FRANK K. *The Adolescent Period: A Graphic and Pictorial Atlas*. Monographs of the Society for Research in Child Development, Vol. III, No. 3 (Serial No. 16). Washington: Society for Research in Child Development, National Research Council, 1938. Pp. vi+246.

STRATEMEYER, CLARA. *Supervision in German Elementary Education, 1918–1933.* Teachers College Contributions to Education, No. 734. New York: Teachers College, Columbia University, 1938. Pp. vi+172. $1.85.

The Structure and Administration of Education in American Democracy. Washington: Educational Policies Commission of the National Education Association and the American Association of School Administrators, 1938. Pp. 128. $0.50.

THOMAS, CHARLES SWAIN, and PAINE, MYRA ADELINE. *Thought and Expression, Book II: A Textbook Designed To Develop Better Habits of Thinking and Greater Skill in English Expression.* New York: Longmans, Green & Co., 1938. Pp. viii+704. $1.72.

VARTY, JONATHAN W. *Manuscript Writing and Spelling Achievement: With Special Reference to the Second and Third Grades.* Teachers College Contributions to Education, No. 749. New York: Teachers College, Columbia University, 1938. Pp. 64. $1.60.

WILSON, LOUIS R. *The Geography of Reading: A Study of the Distribution and Status of Libraries in the United States.* Chicago: American Library Association and University of Chicago Press, 1938. Pp. xxiv+482. $4.00.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

Aida: The Story of Verdi's Greatest Opera. Adapted by Robert Lawrence. New York: Silver Burdett Co., 1938. Pp. 42. $0.60.

ATWOOD, WALLACE W., and THOMAS, HELEN GOSS. The Earth and Its People: Book II, *The Americas.* Boston: Ginn & Co., 1938 (revised). Pp. viii+324. $1.40.

BOUTON, HELEN, and WHITE, NATALIE. *How the Pioneers Moved Westward.* Curriculum Units for Elementary Schools, No. 2. State Department of Education Bulletin No. 1. Sacramento, California: State Department of Education, 1938. Pp. x+110.

BOYER, PHILIP A., CHEYNEY, W. WALKER, and WHITE, HOLMAN. *The Progress Arithmetics*, Book F. New York: Macmillan Co., 1938. Pp. 186. $0.48.

BUSWELL, GUY T., BROWNELL, WILLIAM A., and JOHN, LENORE. *Daily-Life Arithmetics*, Book II. Boston: Ginn & Co., 1938. Pp. x+590. $1.04.

Child Development Readers. *Exploring New Fields* by Beryl Parker and Julia M. Harris, pp. viii+440, $0.92; *Tales and Travel* by Julia Letheld Hahn, pp. viii+472, $0.96; *Highways and Byways* by Beryl Parker and Paul McKee, pp. vi+504. $1.00. Boston: Houghton Mifflin Co., 1938.

DAVENPORT, EUGENE, and NOLAN, ARETAS. *Agricultural Arts: Some Things Every One Should Know About Farming.* Champaign, Illinois: Garrard Press, 1938. Pp. x+308. $1.75.

DEUCHER, SYBIL, and WHEELER, OPAL. *Giotto Tended the Sheep.* New York: E. P. Dutton & Co., Inc., 1938. Pp. 96. $2.50.

DIX, JOHN P. *Vocabulary Booklet in the Social Studies.* For Junior and Senior High Schools (adapted to any year, especially Grades 8, 9, 11, 12) with Pupil Meanings and Examples, Markings, Activities, Testing. Kansas City, Missouri: John P. Dix (Northeast Junior High School), 1938 (revised). Pp. 120.

FELLOWS, MURIEL H. *Little Magic Painter: A Story of the Stone Age.* Philadelphia: John C. Winston Co., 1938. Pp. 112. $2.00.

FRICK, NORMAN K. Vocabulary Power Tests. Chicago: Scott, Foresman & Co., 1938.

GATES, ARTHUR I., BAKER, FRANKLIN T., and PEARDON, CELESTE COMEGYS. *The Caravan of Nick and Dick.* The Good-Companion Books. New York: Macmillan Co., 1938. Pp. x+342. $0.88.

GATES, ARTHUR I., and STRANG, RUTH. Gates-Strang Health Knowledge Tests. New York: Teachers College, Columbia University, 1937. $0.15.

Getting Acquainted with Words. Note-book and Manual for Use of the Dictionary. Chicago: Scott, Foresman & Co., 1937. Pp. 64. $0.12.

HALL, CHARLES GILBERT. *The Mail Comes Through,* pp. 136, $1.32; *Skyways,* pp. 142, $1.32. New York: Macmillan Co., 1938.

New Method Readers. Supplementary Reader, Grade I: *Nine New Fairy Stories* simplified by Michael West, pp. 64, $0.20; Supplementary Reader, Grade II: *Kalulu the Hare* by Frank Worthington, simplified by Michael West, pp. 64, $0.24; Supplementary Reader, Grade III: *Children of the New Forest* by Captain Marryat, simplified by Michael West, pp. 128, $0.40. New York: Longmans, Green & Co., 1937.

O'DONNELL, MABEL. *Down the River Road.* The Alice and Jerry Books. Reading Foundation Series. Evanston, Illinois: Row, Peterson & Co., 1938. Pp. 128. $0.72.

PINTNER, RUDOLF; LOFTUS, JOHN J.; FORLANO, GEORGE; and ALSTER, BENJAMIN. Aspects of Personality. Yonkers-on-Hudson, New York: World Book Co., 1938.

POWDERMAKER, THERESE. *Physical Education Play Activities for Girls in Junior and Senior High Schools.* New York: A. S. Barnes & Co., 1938. Pp. xii+370. $3.00.

To Read and To Act. Scenes selected and edited by Clarence Stratton. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xii+412. $1.24.

STILES, HELEN E. *Pottery of the Ancients.* New York: E. P. Dutton & Co., Inc., 1938. Pp. 128. $2.50.

Teachers' Lesson Unit Series. No. 32 (revised), *Ancient Athens Rebuilt and Relived* (Grade IV) by Esther Francine Pinch and *A City of Today* (Grade III) by Edna Krause; No. 33 (revised), *The Hopi Indians* (Grade III) by Alicia C. King and *Indian Life in Many Tribes* (Grade III) by Patte Jordan. New York: Teachers College, Columbia University, 1938. $0.40.

VERNE, JULES. *A Journey to the Centre of the Earth.* Adapted and rewritten by H. E. Palmer. New York: Longmans, Green & Co., 1938. Pp. 160. $0.56.

PUBLICATIONS IN PAMPHLET FORM

Abstracts of Papers at the Atlantic City Meeting, 1938. Yearbook XXVI of the National Society of College Teachers of Education. Edited by Fowler D. Brooks. Studies in Education, No. 26. Chicago: University of Chicago Press. Pp. 68. $0.50.

An Appraisal and Abstract of Available Literature on: *The Occupation of the General Houseworker.* New York: National Occupational Conference, 1938. Pp. 12.

BECKER, ELSA G. *Guidance in Progress in a Large City High School.* The Third Annual Report of the Guidance Department of the Samuel J. Tilden High School, September, 1934–June, 1935. Brooklyn, New York: Samuel J. Tilden High School, 1938. Pp. viii+166.

Consumers' Bookshelf: A Bibliography of Publications on Commodity Buying and Other Consumer Problems. Consumers' Counsel Series, Publication No. 4. Washington: Superintendent of Documents, 1937. Pp. viii+100. $0.15.

The Continuity of Guidance: Its Function in Education as Related to the Growth of the Individual. Oneida, New York: New York State Association of Deans (Oneida High School), 1938. Pp. 106. $0.50.

Finance and Business Administration. Review of Educational Research, Vol. VIII, No. 2. Washington: American Educational Research Association of the National Education Association, 1938. Pp. 103–212. $1.00.

FOLKS, HOMER. *Changes and Trends in Child Labor and Its Control.* An address at the Thirty-third Annual Luncheon of the National Child Labor Committee held in connection with the 65th Annual Session of the National Conference of Social Work, Seattle, Washington—June 29, 1938. Publication No. 375. New York: National Child Labor Committee (419 Fourth Avenue), 1938. Pp. 30.

HICKER, H. D. *Teacher Personnel and Enrollments in Special Schools and Classes for Exceptional Children in California Public Schools.* State Department of Education Bulletin No. 6. Sacramento, California: State Department of Education, 1938. Pp. viii+22.

HORNE, ROMAN L. *The Farm Business.* Chicago: University of Chicago Press, 1938 (revised). Pp. 56. $0.25.

MOWAT, ALEX. S. *City and Rural Schools: A Comparison of the "Qualifying" Candidates.* Publications of the Scottish Council for Research in Education, XI. London, England: University of London Press, Ltd., 1938. Pp. 80.

Report of the Committee on Admissions from Secondary Schools, University of Illinois, for the Year 1937–1938: For Information of High School Authorities and Others Interested in the Accrediting of High Schools. University of Illinois Bulletin, Vol. XXXV, No. 96. Urbana, Illinois: University of Illinois, 1938. Pp. 16.

"Research Studies on a Secondary School Curriculum for General Living: Reported by Students in Education 366, Offerings of the Senior High School." Secondary Education Series, College of Education, Wayne University, No. 4. Detroit, Michigan: Board of Education, 1938. Pp. xxii+188 (mimeographed).

ROSSBACH, EDITH. *Parent-Teacher Activities at Lincoln School.* New York: Teachers College, Columbia University, 1938. Pp. xiv+42. $0.50.

SARGENT, PORTER. *Human Affairs, 1938.* Boston: Porter Sargent (11 Beacon Street), 1938. Pp. 220.

SMITH, G. MILTON. *A Simplified Guide to Statistics: For Students of Psychology and Education.* New York: Farrar & Rinehart, Inc., 1938. Pp. viii+70. $0.60.

State Rules and Regulations Governing Safety Education in the United States. Washington: American Automobile Association, 1938. Pp. 30.

THIESSEN, N. J. *An Annotated Bibliography of American Historical Fiction.* Bulletin of Information, Vol. XVIII, No. 5. Studies in Education Number (Fourteenth of the Series). Emporia, Kansas: Kansas State Teachers College, 1938. Pp. 66.

Ways to Better High Schools: The Place of Testing in the Supervisory Program. University of Illinois Bulletin, Vol. XXXV, No. 89. Urbana, Illinois: High School Visitor, University of Illinois, 1938. Pp. 34.

What To Tell Them. A Booklet Designed To Be of Special Service to Counselors, Guidance Workers and Agencies, with Reference to Negro Girls and Boys in Seattle; and for the Use of Students Themselves. Publication No. 1. Seattle, Washington: Seattle Urban League (Second Avenue at Cherry Street), 1938. Pp. 34.

WICKMAN, E. K. *Teachers and Behavior Problems.* Digest of *Children's Behavior and Teachers' Attitudes.* New York: Commonwealth Fund, 1938. Pp. 40. $0.25.

WILLIAMS, R. C. *Cost of Pupil Transportation in Consolidated Schools of Iowa.* Research Bulletin No. 22. Des Moines, Iowa: State Department of Public Instruction, 1938. Pp. 32.

UNITED STATES OFFICE OF EDUCATION PUBLICATIONS:

Bulletin No. 14, 1937—*Successful Practices in the Teaching of English to Bilingual Children in Hawaii* by Willis B. Coale and Madorah E. Smith, with the assistance of Jitsuichi Masuoka. Project in Research in Universities. Pp. xii+164.

Bulletin No. 28, 1937—*Needed Research in Secondary Education* by Carl A. Jessen. Pp. 70.

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Educational News and Editorial Comment

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The Decline in Elementary-School Enrolments and Problems of School Organization

For a number of decades birth-rates in the United States have been falling rapidly. In the North and the West, from Maine to Oregon, the West North Central States constitute the only census division in which fertility of native white women is sufficient for family replacement. There are only four cities (Salt Lake City, Utah; Flint, Michigan; Gary, Indiana; and Knoxville, Tennessee) in the entire United States, with populations of one hundred thousand or more, in which birth-rates are sufficiently high to maintain the native white population at its present level. The South has higher birth-rates than any other major region of the nation, but it is also the section in which fertility is falling fastest. It is estimated that in 1940 there will be approximately 1,500,000 fewer children of elementary-school age than in 1930. Already the first five grades have registered declines in enrolments, and in time the same may be expected to be true of the upper grades. A decline in enrolments in the elementary school will raise significant problems of school organization.

A recently published bulletin of the United States Office of Education, *Statistics of City School Systems, 1935–36* (the advance pages

of chapter iii of Volume II of the *Biennial Survey of Education in the United States: 1934–36*) contains the following statement concerning declining enrolments in the elementary grades.

In 1935–36 the total number of pupils enrolled in the public day schools of the city school systems was 12,971,108. Of this number 6,582,298 were boys and 6,388,810 were girls. In addition to the regular day-school enrolments there were 783,726 persons attending night schools; 117,176, summer schools; and 120,707, part-time and continuation schools.

From 1933–34 to 1935–36 the total enrolment in the city public day schools decreased by 78,036 pupils, or about one-half of 1 per cent. Of this number 56,310 were boys and 21,726 were girls. In each of the four groups of cities except Group I, there was a slight increase in the number of pupils enrolled. In Group I the enrolments decreased from 6,321,194 in 1933–34 to 6,204,179 in 1935–36, a decrease of 117,015, or about 1 per cent.

A comparison of the percentage of pupils enrolled by grades in 1931–32 and in 1935–36 in a sampling of 25 cities having a population of 100,000 or more and in 75 cities having a population of 2,500 to 100,000 shows that a smaller percentage was enrolled in the kindergarten and first five grades and a larger percentage in the last seven grades in 1935–36 than in 1931–32. The grade enrolments within the period show a marked decrease in the kindergarten, first, second, and third grades, by a progressively diminishing amount in the fourth and fifth grades and changing to an increase in the sixth grade of 1.3 per cent in cities having a population of 100,000 or more and 2.3 per cent in cities having a population of 2,500 to 100,000. In the grades above the fifth there was an increase in each up to and including the twelfth in which there was the largest increase, amounting to 21.1 per cent in the large cities and to 19 per cent in the others.

Data compiled for 100 cities having a population of 10,000 or more show that from 1933–34 to 1935–36 the kindergarten enrolment in these cities decreased 2.8 per cent and the elementary-school enrolment 4.7 per cent, and that the junior high school enrolment increased 9.6 per cent, the junior-senior high school 9 per cent, the senior high school 10 per cent, and the four-year high school 9.6 per cent.

Because of the decrease in elementary-school enrolments several questions arise. What will be the effect upon schoolhouse construction for elementary schools? To those persons who think that an elementary-school building should contain nothing but classrooms there is no problem in view of the decreasing enrolments. But is this true? According to a recent study made by the Office of Education it was found that 39.3 per cent of the school buildings in 506 cities of 10,000 population and over are more than thirty years old and that such buildings do not contain auditoriums, gymnasiums, and facilities for nature study, shopwork, art, music, play and recreation, dramatics, and motion pictures. It is thus evident that new elementary-school buildings are needed in many cities in order to provide the proper educational facilities for children of the present day.

What will be the effect on school organization? When enrolments were increasing and more school buildings were needed to house the additional number of children, many cities used the occasion to organize three-year junior high schools which relieved the elementary schools of Grades VII and VIII and the high schools of Grade IX. Now that the elementary-school enrolment is decreasing, there is no occasion, so far as school buildings are concerned, to relieve the elementary schools of some of their pupils. Will the cities in which the elementary-school enrolment is decreasing continue to organize separate junior high schools or will they organize such schools and house them with elementary schools? Will some cities take the seventh grade out of the junior high schools and include it with the elementary schools? Will five-year undivided high schools be organized? No specific answers can be given to these and other questions that are arising because of decreasing enrolments in the elementary schools. Each city will have its own peculiar problems which can be solved only by a careful analysis of the situation.

A Comprehensive Investigation of the Status and Problems of Education in the United States

The Advisory Committee on Education, appointed by President Roosevelt to study the relation of the federal government to education, has announced the publication of a series of nineteen studies prepared by members of its technical staff. The importance of this group of studies is apparent from the list of titles and authors. The complete list follows.

1. *Education in the Forty-eight States.* Payson Smith, Frank W. Wright, and Associates.
2. *Organization and Administration of Public Education.* Walter D. Cocking and Charles H. Gilmore.
3. *State Personnel Administration with Special Reference to Departments of Education.* Katherine A. Frederic.
4. *Expenditures and Sources of Revenue for Public Education.* Clarence Heer.
5. *Principles and Methods of Distributing Federal Aid for Education.* Paul R. Mort, Eugene S. Lawler, and Associates.
6. *The Extent of Equalization Secured through State School Funds.* Newton Edwards and Herman G. Richey.
7. *Selected Legal Problems in Providing Federal Aid for Education.* Robert R. Hamilton.
8. *Vocational Education.* John Dale Russell and Associates.
9. *Vocational Rehabilitation of the Physically Disabled.* Lloyd E. Blauch.
10. *The Land-Grant Colleges.* George A. Works and Barton Morgan.
11. *Library Service.* Carleton B. Joeckel.
12. *Special Problems of Negro Education.* D. A. Wilkerson.

13. *The National Youth Administration.* Palmer O. Johnson and Oswald L. Harvey.
14. *Educational Activities of the Works Progress Administration.* Doak S. Campbell, Frederick H. Bair, and Oswald L. Harvey.
15. *Public Education in the District of Columbia.* Lloyd E. Blauch and J. Orin Powers.
16. *Public Education in the Territories and Outlying Possessions.* Lloyd E. Blauch.
17. *Education of Children on Federal Reservations.* Lloyd E. Blauch and William L. Iversen.
18. *Educational Service for Indians.* Lloyd E. Blauch.
19. *Research in the United States Office of Education.* Charles H. Judd.

Study 13, *The National Youth Administration*, has already been published. The authors of this study reach the following conclusion.

> Through the extension of educational opportunities to the underprivileged, the Youth Administration has uncovered a reservoir of competent youth desirous of continued education for whom almost no provision has been made in the past. It has demonstrated the possibility of providing educational opportunities at small cost which have proved of considerable advantage to the youth and to the institutions involved. And . . . . it has increased school and college enrolments by 300,000 to 400,000 without sacrificing quality to quantity.

The committee has announced the following tentative publication schedule for the studies not yet issued: September, Studies 11, 15, 9, and 2, probably in that order; October, Studies 7, 8, 14, 5, 6, and 17; November, Studies 4, 10, 19, 1, and 16; and December, Studies 3, 12, and 18. This schedule is only approximate and is subject to change, but every effort is being made to have all studies issued by the end of December, 1938.

The studies will range in length from fifty to three hundred pages and will be printed in the same type and format as the Report of the Advisory Committee on Education. Upon publication, copies of the studies may be procured from the Superintendent of Documents, United States Government Printing Office.

Here and There among the Schools

Items selected for reporting in this issue of the *Elementary School Journal* relate to units of work, school and community relations, corrective-speech classes, and rural-school supervision. They are drawn from school systems located in Minnesota, Pennsylvania, Colorado, and Illinois.

Description of a social-studies unit for Grade I The Mankato State Teachers College, Mankato, Minnesota, has published for use in Grade I a social-studies unit entitled "The Dairy Industry." The unit was prepared and taught by Helen Narber, a member of the staff of the college elementary school. Miss Narber's diary record of the unit was partially condensed by Anna M. Wiecking. The following paragraphs quoted from the introductory statement describe in general the content of the publication.

The following pages include (1) the purpose of the unit; (2) the understandings to be taught, written up as the outline of content, which is the teacher's subject-matter organization. The outline of content is a unified whole, each part of which makes a definite contribution to the purpose set up for the unit. Following the outline of content comes the teaching procedures, in which each element of the outline has been broken down into the specific learning experiences designed to bring about understandings. The sentence headings of the outline of content are repeated in the teaching procedures and should be used by the reader in following through the description. The outline of content is briefly stated and does not cover the factual content necessary to bring about understanding.

The unit was . . . . written up . . . . in diary form, thus making a record of actual happenings. Since it was impossible to reproduce the large amount of material that comprised the diary record, it was decided to reproduce only certain parts, abstracting other parts. The whole is therefore a partially condensed account.

Teachers who wish to use this material should remember that it is not a pattern, but merely one record of how a particular teacher taught a unit to a particular group under particular local conditions. Some teachers will not be able to devote as much time to the unit and will of necessity not use such an inclusive or detailed plan.

Units of work for pupils in orthogenic classes The supervisor and the teachers of orthogenic classes in Pittsburgh have been developing units of work for these classes for a number of years. More than seventy-five units have been worked out, covering a wide range of interests, such as home, food, shelter, community, and nature study. In a recent issue of *Pittsburgh Schools*, an official publication of the Board of Education, a number of units are presented to illustrate the types of work done.

Keeping the community informed about the work and needs of the schools

"Our School Community News" is the title of a publication through which George N. Wells, superintendent of schools in Elmwood Park, Illinois, seeks to give pupils an opportunity to conduct a school paper and at the same time to provide citizens with the type of information that they need to understand the work and problems of the schools. The second number of the publication, which has come to our desk, contains a variety of news with respect to what is going on within the schools, and it contains also a rather extended statement by Superintendent Wells embodying factual information that should be of interest to all thinking members of the community.

Speech-correction classes in the schools of Denver

In the official publication of the Denver public schools, the *School Review*, appears the following comment on the work being carried on in the speech centers of that city.

Approximately 1,000 pupils are enrolled in the speech-correction classes of the Denver Public Schools. During 1936–37, the enrolment was 944. At the end of that school year 526 of these pupils, or 55 per cent, were dismissed as corrected cases. Correction of speech difficulty was effected for 58 per cent of those enrolled for phonetic difficulties, for 57 per cent of those who lisped, and for 49 per cent of those who stammered.

Speech-correction centers are located in twenty-four of Denver's elementary schools. Pupils in schools other than these report at the speech centers certain days in the week for work with the speech teachers. In all other situations, they remain members of the classes to which they normally belong.

Speech centers are changed frequently in order that children of different localities may have easier access to them and that as many sections of the city as possible may be served.

The work in speech correction is done with children in the kindergartens and primary grades. This is the best period in the child's life for speech-correction work. If speech help can be given to a little child who is not developing normal speech, much can be accomplished and a great deal of unhappiness avoided. However, children are enrolled throughout the elementary grades, and they make excellent progress.

The idea that speech difficulties will be outgrown or will disappear has been discarded. It is now realized that it is poor economy to allow a child to continue struggling for several years to make himself understood under the assumption that sometime he will correct his difficulty himself. Many do, but there is no means of knowing who will or who will not make such correction. The malad-

justment which often results is a high price to pay for such experimentation. While the child is outgrowing his speech defects, he may be developing many unhealthy mental attitudes.

Many studies have been made which show that children with speech difficulties do not differ from other children in the matter of learning ability. Once their speech handicaps are removed, they fit into their classes just as other children do.

Speech correction offers many contributions to the educational program of the Denver public schools. Through conferences with parents and teachers the doctrine of good speech is spread. Help is given to children in small specialized groups. Normal social adjustments are effected once the children acquire ability to fill their places freed from the worry and annoyance they have had in expressing themselves.

An experiment in the supervision of rural schools

From Cora DeBoer, grade supervisor of Kane County schools (Geneva, Illinois), we have received an account of an interesting experiment which is being carried on in the schools of that county. For the past year a reading supervisor has had complete charge of the work in reading in the rural schools. An extensive testing program was initiated in order to discover the pupils who were in special need of assistance. The testing program included reading-readiness and individual intelligence tests for all first-grade pupils; reading tests for Grades II and III; partial batteries for the other grades; group intelligence tests for the upper grades; and, finally, specialized tests for those children with educational handicaps, such as reading disabilities.

Miss DeBoer comments as follows on the use made of the information gained from the tests and on the general results of the experiment to date:

Those children who on the achievement tests were six months or more retarded in reading or arithmetic were considered educational problems and cases in which follow-up work should be done. As visits were made to the schools, group intelligence tests were given from Grade III up. To any child found to rate extremely low on the group test, an individual test was given. It was found, however, that the group test used was highly satisfactory and gauged the true level of ability very well. On visits to the schools the supervisor also gave diagnostic reading tests and made recommendations for remedial work.

What is the net result of this intensive supervisory program? It is almost too soon to tell, but a few definite gains can be noted.

The attitude of the teachers is changing from a defensive one to an eager

one; they are asking for advice and help instead of shying away from any contact with the supervisor. Requests are made for visits by the supervisor, and, as one teacher said, "The responsibility for lack of gain is not a nightmare any more because the supervisor is sharing it. She knows what the children can or can't do, and we don't have to feel so discouraged."

The methods of teaching reading have definitely changed in several schools, one teacher in particular working out an entirely new plan which has been highly successful.

There has been an increase in the flexibility of the school curriculum. Many of the teachers had felt that they must keep the children strictly in a certain grade; now the feeling increasingly is that the child should be allowed to work where he can. . . . .

A new interest in the teaching of reading has been aroused, and there are exchanges of ideas and methods. Finally, the supervisor knows the educational status of every child in the rural schools. She has a card file containing information about every child, with his educational record, his intelligence quotient, and other pertinent information. She knows whether the child is working up to his ability; she knows a great deal about his family background and is thus able better to interpret his achievement in configuration, rather than torn out of context.

The year's program was completed with the administration of achievement tests from Grade I through Grade VIII. The results are to be compared with those of the previous tests, progress or lack of it noted, profiles drawn for each child, and the scores entered in his file.

Then, of course, the value of this intensive supervisory plan will show up, if it has any value at all. It will be beyond the tentative experimental stage, and mistakes can be rectified.

School-Building Needs in the United States

The United States Office of Education has recently published a bulletin (No. 35, 1937) on *The School Building Situation and Needs*, written by Alice Barrows, senior specialist in school-building problems. It presents detailed data with respect to the types of schools for which buildings have been constructed during the past three years, the kinds of facilities provided in them, and the costs of the different types. It also contains information with regard to the need for additional school buildings.

For the three-year period ending in December, 1936, the Public Works Administration had allotted $244,976,114 in grants and loans for public-school buildings, the total estimated cost of which is $469,005,001. These expenditures, large as they are, have by no means

met the building needs of the country. It is estimated by superintendents of schools in 62.3 per cent of the cities with populations of 10,000 or over that an additional $496,745,782 is needed for school buildings. State departments of education in seven states estimate that $220,000,000 is needed for the construction of schools in places having populations of less than 10,000.

The following paragraphs present an explanation of the reasons why school-building needs are as great as they are.

The question naturally arises as to why public-school officials report that they need additional funds for school-building construction when approximately $156,000,000 has been made available each year since December, 1933. Some of the reasons are as follows:

School-building construction still in arrears.— . . . . the P.W.A. grants and loans for school buildings, helpful as they were, did not begin to restore appropriations for school buildings to the pre-depression level which, in turn, was not sufficient to make up for the effects of the war on school-building construction.

Enrolment increases.—In the meantime, the average yearly enrolment increased from 20,484,325 in the war period (1914–20) to 26,129,216 in the period from 1930 to 1934. This is an increase of 27.5 per cent in average yearly enrolment during the period when capital outlay reached the low figure of $2.24 per pupil.

The larger part of this increased enrolment was in the high schools where the average number enrolled per year in the period 1930–34 was 178.6 per cent greater than in the period 1914–20. The present high-school plant in the country as a whole is inadequate to meet this unprecedented increase in enrolment.

Modern times demand modern schools.—Although there was not such an increase in the elementary schools, the need for school-building construction for elementary pupils is just as pressing. It is sometimes stated that because of the decrease in elementary-school enrolment, school-building construction is not important for elementary schools. This is not true. Although there was a slight decrease in elementary-school enrolment in 1934 as compared with 1932, this decrease is offset from the school-building standpoint by the fact that the larger part of the elementary-school plant needs modernization. Many elementary-school children are still housed in one-room schools which need to be eliminated and supplanted by centralized school plants with modern equipment. Many elementary schools, even of eight or twelve rooms, do not come up to modern standards of heating, ventilating, lighting, and sanitation.

Furthermore, because of the complex conditions of modern life it is necessary for the school to give children in the elementary grades a much richer and more varied educational program than formerly in order that they may develop the intelligence and resourcefulness to meet the conditions of a changing civilization. It is now recognized that elementary schools as well as high schools should

provide opportunities for work in science, art, music, nature study, shopwork, and facilities for play and recreation, dramatics, and motion pictures. But the average elementary-school building in the country was not constructed for such a curriculum. For example, the result of the study described later in this report showed that 39.3 per cent of all school buildings in 506 cities of 10,000 population and over are more than thirty years old. The majority of buildings erected more than thirty years ago did not contain modern auditoriums with a good stage, sloping floor, and good acoustical qualities. Nor did they have gymnasiums with showers, lockers, and dressing-rooms, and it was the exceptional elementary school which provided rooms and equipment for nature study, shopwork, art, and music. In other words, it may be said that as a general rule, buildings erected more than thirty years ago are obsolescent from both an educational and constructional standpoint.

The general conclusion reached in the study is stated as follows:

School housing is vitally important from an educational and social, as well as from a constructional, standpoint. A school-building program can be the lever by means of which a school system may be reorganized along modern, progressive lines. For example:

1. Thousands of school children are still housed in one-room schools. There are 132,000 one-room schools in the United States. A school-building program makes possible the elimination of these small schools and the reorganization of many small schools into larger administrative units.

2. If the children of today in elementary and high schools are to be equipped to meet the conditions of modern life and deal with them intelligently, it is necessary for the school to provide the facilities needed for a modern curriculum, i.e., science laboratories, libraries, art rooms, music rooms, commercial rooms, gymnasiums, auditoriums, etc. The average school building of thirty years ago did not have these facilities. Yet the present study revealed that over 39 per cent of the school buildings in 506 cities of 10,000 population and over are more than thirty years old.

3. The school must now provide not only for children in elementary and high schools but also for the thousands of boys and girls of eighteen to twenty-one years of age who are neither in colleges or universities nor at work. Technological changes in industry are going to increase rather than decrease the numbers in this group who must be taken care of by the schools. The curriculum will have to be changed to meet the needs of these young people. This means that school buildings will have to be altered and equipped to meet these needs.

4. The schools must also provide opportunities for adults for re-education in new lines of work made necessary by industrial changes and for recreation during leisure time. The modern well-planned high school is adapted for use by adults, but more buildings of this type are needed.

5. School plant surveys are essential for adequate school plant programs. The lack of data available as to school-building requirements for places under

10,000 population indicate that state departments of education are justified in their conviction of the need of school-building divisions with adequate staffs and funds for making comprehensive and continuing surveys of school-building needs. Modern school buildings are needed. But they should be constructed only where needed. Such need cannot be determined except on the basis of comprehensive long-range surveys which take into consideration population trends, economic and social trends, and the educational program needed for the children, youth, and adults of a given community.

The Progress of Education in England

American readers familiar with the general lines of development of education in England will recall that in 1936 an act was passed by Parliament making possible a thoroughgoing reorganization of post-primary education. The act raised the leaving age to fifteen and authorized the establishment of junior secondary schools which would enrol pupils from eleven to fifteen years of age. In order to make it possible for the non-provided schools (private) to put into operation the essential features of the new law, the local authorities were authorized to bear part of the expense of enlarging or remodeling non-provided school buildings.

The Report of the Board of Education for 1937 indicates substantial progress along a number of lines. The local authorities are providing better facilities for physical education; the number of pupils in grant-aided schools increased by about 3,000; approximately 83 per cent of the pupils admitted to secondary schools had come direct from public elementary schools and more than half (58 per cent) were admitted free; 61.5 per cent of the pupils eleven years old and over were in reorganized schools; and the number of children enrolled in nursery schools had materially increased.

The London *Times Educational Supplement* comments editorially on the report as follows:

> The Board's report for 1937 . . . . presents on the whole an encouraging picture of educational progress. Local authorities are going ahead with schemes of reorganization. Over-large classes are diminishing, the quality of the teaching staffs is improving, and practical instruction is now being given in nearly all senior departments. More nursery schools were set up last year than in any previous year, and the health of children of all ages is being attended to by the provision of additional playing fields and the establishment of holiday camps. Another satisfactory development is the widespread interest in physical education

which the Board describe as "one of the outstanding features of the year 1937." This interest has led local authorities to give effect to the recommendations of the Board contained in Circular 1445 issued early in 1936. Many more organizers of physical education have been appointed. At the beginning of 1936 only 124 out of 316 local educational authorities had made such appointments. By the end of 1937 the number of organizers had increased to 293, of whom 140 were men and 153 women, compared with 87 men and 95 women at the beginning of 1936. No doubt further appointments will be made when the aims of the Board are better understood. . . . .

Many deficiencies, of course, still exist. Although the number of black-listed schools has fallen from 2,827 to 1,867 in 1937 the progress is slow. Only 73 such schools were removed from the list last year. Though it is true that plans for the reconstruction, improvement, or replacement of 120 others have been approved, it seems time that a limit should be placed on the period during which they should be allowed to continue. . . . .

It is essential that there should be a better understanding by industry of the needs of youth today. The Board's report tells us how limited are the opportunities given for employees to take time off during the day for technical education. There has been some increase recently in the number of young workers released from their occupations during working hours. The figure for 1936–37 was 36,225, compared with 32,810 in 1935–36, but generally the young employee anxious to improve his qualifications has to seek training in his own time, nor does it seem always easy to obtain the technical training which is desired. The Board state that while returns are not yet available, reports from various parts of the country suggest that there was a widespread further increase in the entries for the session which opened in September, 1937, and go on to say that in some cases the number of students seeking to enrol exceeded those for which provision could be made. It cannot be regarded as satisfactory that in great measure training for industry and commerce rests mainly on a basis of evening attendance. It is realized that firms cannot give the teaching which was at the disposal of apprentices in the past, yet it has been urged again and again that the growth of mechanical processes is likely to increase and not to diminish the need for skilled and resourceful workers. The Board believe that with the fall in the number of young persons in the age group fourteen to eighteen who will be ready for employment with the raising of the school-leaving age from September, 1939, more attention will be paid to questions of recruitment for industry and commerce and to the need of securing proper arrangements for training after entry into employment. Schemes for co-operation between local authorities, both for technical and art education, are in force or under discussion which should strengthen the position of education in relation to commerce and industry. Some excellent arrangements for regional organization have been already prepared both in the North and Midlands—arrangements which are concerned not only with technical training but also with the recruitment and teaching of

designers for various crafts. It is clear that the Board of Education are alive to the needs of the present day and are prepared to give every encouragement to local authorities to improve technical training.

Regional and Community Differences in Accessibility of Public Libraries

In a recently published volume entitled *The Geography of Reading*, Louis R. Wilson, dean of the Graduate Library School of the University of Chicago, presents the findings of an extensive survey of the distribution of library resources among the states and regions of the United States. In general, those areas having the poorest schools are also characterized by the least adequate library facilities. Approximately 45,000,000 persons in this country are without public library service. Of this number, 88 per cent live in rural communities; 8,000,000 are Southern negroes; and 22,500,000, or one-half the total, are found in the Southeast and the Southwest.

Dean Wilson comments as follows on the accessibility of libraries to urban and rural populations:

A third type of variation in the accessibility of library service is that which exists between urban and rural populations. Since 1880 the United States has rapidly changed from a rural to an urban nation. In that year only 14,000,000 people, or 29 per cent of the total population, lived in cities. In 1930, 69,000,000, or 56.2 per cent, lived in cities, with 54,753,645, or 44.5 per cent, living in 96 metropolitan districts. . . . . Massachusetts and Delaware provide service for their entire populations, both urban and rural. Arkansas, with only 2.92 per cent of its rural population living in service areas, stands at the opposite extreme. The mean for the forty-eight states is 34.92 per cent.

Between 1926 and 1933 the number of cities of 5,000, or more, population not having library service increased—largely through normal population growth —from 179 to 233. Of the more than 4,000,000 inhabitants of Pennsylvania living in areas unserved by libraries, approximately 2,000,000 were in places having populations of 2,500, or more. Not only was there an increase in the number of cities of 5,000 population, or more, without service, but the total number of urban population without libraries increased from 2,917,597 to 5,456,881, a gain of from 5.4 to 7.9 per cent. At the same time, rural population without service dropped from 42,151,291 to 39,673,273, or from 82 to 73.7 per cent. . . . .

The preceding data, however, do not reveal as clearly as they should the salient facts with which they deal. It is important to observe that of the 45,130,098 people in the United States who are without public-library service, 39,673,217, or approximately 88 per cent, live in the open country, or in towns of less

than 2,500 population. This number, as just stated, constitutes 73.7 per cent of the total rural population. Only 5,456,881, or 12 per cent, live in urban areas, and this number is but 7.9 per cent of the total urban population. Here, then, is America's greatest library problem, the problem of providing effective public-library service for the one-third of the total population who live on farms and in the small towns and villages of rural America. And, like the problems of the rural school, the rural church, the rural community, its solution will require the combined effort of all organizations and individuals interested in the enrichment of rural community life. The librarian, the minister, the teacher, the political scientist, the rural sociologist, the land-grant college, the farm paper, the department of agriculture, these, and others, will have to work jointly in their common solution.

The county library, which was developed in the early 1900's as a means for promoting library extension to unserved rural areas, has seemingly made little progress in the last decade. Of the 3,000 odd counties in the United States, only 230 had established such libraries (spending $1,000, or more, annually) in 1935; and the movement which had proved so successful in providing service in rural areas in California from 1910 to 1930, and in England from 1920 to 1935, seems to have lost, temporarily, much of its force. The depression may have been a modifying factor. Relatively small populations, limited assessed valuations, and other causes have also affected the situation. At present, librarians are hopeful that the regional library, which may include two or more counties, or a trade area with larger populations and taxable resources, may prove a more efficient type for this purpose. Its successful development, it is hoped, may achieve the double objective of wiping out the discrepancy between the increase in the total population and that in the population served, and of providing a more effective means of accessibility in rural areas.

Plan for a State Teachers' Retirement System

The American people appear to be committed wholeheartedly to the principle of old-age security through joint contributions by employer and employee. In January of this year the American Institute of Public Opinion released the results of a poll of opinion on the federal old-age benefit plan. According to this poll, approximately 89 per cent of the people approve the principle of old-age benefit allowances, and 73 per cent approve joint contributions by employer and employee. No less than 64 per cent of the employers themselves favor the benefit tax that they are required to pay under the law. In view of this popular approval of a system of old-age security, it is not surprising that increased attention should have been given to the establishment of retirement systems for teachers. In

1937 five states which had no systems in operation created retirement systems based on sound actuarial principles. During the same year four states completely rewrote their laws, and eight other states amended existing laws. In four states commissions were appointed to study the problem and to report recommendations.

Persons interested in old-age security for teachers will find it profitable to examine a recently published bulletin of the Nebraska State Teachers Association entitled "A Teachers' Retirement System for Nebraska." Although the major part of the bulletin is devoted to an explanation of the plan proposed for Nebraska, attention is also given to the status of teacher-retirement legislation, to the sociological aspects of old-age security for teachers, and to the principles underlying a sound retirement system. The bulletin should be particularly helpful to teachers in other states who may be concerned with the establishment of new, or the modification of old, retirement systems. It may be secured from the Nebraska State Teachers Association, Lincoln, Nebraska, for thirty-five cents.

Consumer Education in Pennsylvania

THE following statement is quoted from a recent issue of the *American Consumer*.

What may well prove to be the most important development of this decade in consumer education was initiated last month when Dr. Lester K. Ade, superintendent of public instruction for the state of Pennsylvania, announced that his department would organize a plan in co-operation with the Department of Agriculture to inaugurate a course in consumer education in the public schools of Pennsylvania.

Adoption of such an educational program by our second most populous state is deemed certain to quicken the consumer-education movement throughout the nation.

Dr. Ade believes that in all fields of education, our social-economic courses need to be organized to conform with a new conception of social-business education, so as to teach intelligent consuming, as well as production and distribution. In a statement to the *American Consumer* this month, he said:

"The modern market offers a range of selection which is tremendously enlarged, making intelligent purchasing judgment difficult. Consumers are often guided in their market choices by advertising, salesmanship, propaganda and social pursuit, rather than by the exercise of their own good judgment.

"Because the average man has received little education in school along the line of consumer education and finance, he is inclined to act even without re-

flection, and to spend months or years in making a few thousand dollars which he will 'invest' in a few minutes.

"The consumer's standards in judging many of his possible purchases are a mixture of his own experience, the ancient adages of trade, the tips of 'wise' friends, the slogans of advertising campaigns, the 'line' of high-pressure salesmen, and a faith in well-known brands. From the social point of view, financial education is desirable in order to reduce the waste of capital involved in misplaced savings."

Who's Who for October

The authors of articles in the current issue Floyd W. Reeves, professor of education at the University of Chicago. John A. Hockett, assistant professor of education at the University of California. Harry Houston, supervisor of handwriting in State Teachers College and New Haven Public Schools, New Haven, Connecticut. Arthur I. Gates, professor of education at Teachers College, Columbia University. David H. Russell, assistant professor of education at the University of Saskatchewan. William S. Gray, professor of education at the University of Chicago. Dora V. Smith, associate professor of education at the University of Minnesota. Frederick S. Breed, associate professor of education at the University of Chicago. Frank N. Freeman, professor of educational psychology at the University of Chicago. R. M. Tryon, professor of the teaching of the social sciences at the University of Chicago. Edith P. Parker, assistant professor of the teaching of geography at the University of Chicago.

The writers of reviews in the current issue Harold H. Punke, professor of education at the Georgia State Woman's College, Valdosta, Georgia. Edgar Dale, research associate in the Bureau of Educational Research and associate professor of education, Ohio State University. Frederic M. Thrasher, professor of education at New York University. Luther C. Gilbert, associate professor of education at the University of California. Burr W. Phillips, assistant professor in the teaching of history at the University of Wisconsin. R. E. Swindler, instructor in education at the University of Virginia. Roy Ivan Johnson, director of the Division of Skills and Techniques, Stephens College, Columbia, Missouri.

THE SOCIAL PHILOSOPHY OF TEACHERS

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TWO million young men and women are added each year to the ranks of the nation as adult workers and potential voters. The social intelligence and the social attitudes of these youth are matters of vital concern to the national welfare. Are these young men and women socially intelligent and socially minded? Are they equipped to perform the duties that go with citizenship in a democracy? Has their education been adequate for this purpose? A careful consideration of the present situation in the United States must lead to negative answers.

EDUCATION IN ITS SOCIAL SETTING

Today, twenty years after the World War, this nation is faced with a disheartening state of affairs. Millions of men and women who should be producing economic goods and services are idle. At the same time, the needs of other millions for food, for clothing, for shelter, for medical care, and for education are inadequately met. Millions are on relief. Labor is in conflict with management. Financial interests are in conflict with the interests of both farmers and labor. The capitalistic economy of the United States, as now operated, has not yet demonstrated its ability to cope with the problems of unemployment and distribution. This nation is faced with international problems of major importance. It is engaged in the greatest armament race in history. Old sanctions in religion and morals have been weakened or destroyed. This age is one of fear and confusion.

The people of the United States are in the process of modifying their faith in economic individualism. To an ever greater extent, government is entering into the field of business. This trend has been under way for many years; it is steadily gaining momentum; its end is not yet in view.

Large numbers of adults are poorly equipped to perform the duties of citizenship in these difficult times. They understand little of the underlying causes of the disturbances that occur in the social and economic order. They have given almost no thought to the ways in which political and social institutions function. Most of them lack firsthand knowledge of industrial conditions. They know little about the housing conditions of wage-earners. Unless they were brought up in rural areas, they know little about the problems of rural life. They know even less about the interrelations of rural and urban life. They lack information concerning the history or the purposes of labor organizations. Few of them have ever given serious consideration to employee-management relations in industry or in government.

These adults are now and will continue to be subjected to severe social pressures. They may try to resist the pressures of class interests if they recognize these as such, but usually they have not been educated to recognize the nature of such pressures. They readily become the victims of propaganda. They are easily swayed by slogans. They have not been prepared to distinguish between the true and the false, between education and false propaganda.

Yet these adults are the products of the educational system. Most of them have completed the elementary school; large numbers have completed the high school; many of them hold college or university degrees. During the period of their formal education they have accumulated knowledge of many isolated facts; but they have seldom been taught to see the interrelations between these facts or to relate the facts to basic principles that will lead to a solution of social, economic, and governmental problems. Their social philosophy is underdeveloped: although they possess some knowledge, they have not acquired wisdom.

The time has arrived when educational institutions must give serious consideration to the problem of preparing youth for effective participation in community life. The development of social intelligence is one of the major responsibilities of such institutions. Schools and colleges have no function more important. Students should be made aware of the existing social situation with its wide disparities of opportunity. Furthermore, they must be led to want to do some-

thing to correct it. They can be made aware of social problems and can work for the solution of those problems only through an understanding of social structure and social processes.

The development of social intelligence is not a function that can be isolated from other aspects of education and be set apart to be performed by social-science teachers alone. It is an obligation that must be assumed by all teachers working in all fields and at all levels of the educational system.

For the development of social intelligence the facts learned in school are important, but they are not so important as a study of the interrelations of these facts. Merely to teach, for example, the extent to which the government is embarking upon new enterprises is not enough. Teachers must learn why such trends are as they are. They must master the underlying causes—economic, social, and psychological. They must analyze current movements and try to understand the reasons that lie back of these movements. They must gain this understanding in order that they may be in a position to teach their students to study social trends, their causes and their results.

Both teachers and students need knowledge, but knowledge alone is not enough. The importance of knowledge lies in its relation to philosophy. Knowledge of social conditions is important only because such knowledge is essential to the development of a desirable social philosophy. The goal sought through education is wisdom. Wisdom implies a social philosophy based on knowledge and eventuating in desirable social action.

REMUNERATION AND QUALIFICATIONS OF TEACHERS

If it be granted that the development of a social philosophy which will lead to desirable social action is a major responsibility of education, then it becomes important that educational agencies employ teachers qualified to assist in the development of such a philosophy. Consideration should be given to the extent to which such teachers are now available.

The qualifications of teachers are closely related to the salaries which they receive. Consequently the adequacy of teachers' salaries becomes a matter of major importance. Available facts indicate

that present salaries are so low as to make it either difficult or impossible to secure the services of well-qualified teachers.

One measure of the qualifications of teachers is the extent of their general education. A study of the amount of education possessed by teachers, expressed in years of schooling, shows clearly that teachers as a group lack adequate preparation for their professional duties. Data assembled for the National Survey of the Education of Teachers show that in 1930–31 about 14 per cent of the teachers in the United States had completed less than two years of college education. Of the teachers in the one- and two-teacher rural schools, 62 per cent had had less than two years of college training.[1]

The low salaries received by teachers, coupled with unsatisfactory educational qualifications, cannot fail to affect the social attitudes of teachers. In the discussion of this topic an attempt will be made to answer in part the following questions: (1) What is the social philosophy of teachers? (2) What factors are responsible for it? (3) What constitutes a desirable social philosophy for teachers? (4) How may such a social philosophy be developed?

THE PRESENT SOCIAL PHILOSOPHY OF TEACHERS

Teachers do not have a social philosophy; they have social philosophies—as many social philosophies as there are teachers. Teachers vary greatly in their attitudes toward social problems. Some of these attitudes are scarcely worthy of being termed social philosophies because the teachers concerned have done so little thinking in connection with social problems. As a result of careful study, however, a few teachers possess matured social attitudes and beliefs that serve as effective guides to action. The existing variation in social attitudes results from a number of factors, such as the environment in which teachers were reared; the communities where they reside and work; the social and economic problems that they face; and their native intelligence, education, and temperament.

In order to discover the social attitudes and information possessed by American secondary-school teachers, the John Dewey Society for the Study of Education and Culture authorized a national survey to

[1] Edward S. Evenden, Guy C. Gamble, Harold G. Blue, *Teacher Personnel in the United States*, p. 43. National Survey of the Education of Teachers, Vol. II. United States Office of Education Bulletin No. 10, 1933.

be made during the spring of 1936.[1] A special testing instrument was devised, consisting of 106 propositions commonly assumed to be controversial issues. The tests were scored in accordance with a "liberalism-conservatism" key, constructed with the aid of more than a dozen well-known American citizens, including a former President of the United States, three presidential candidates, congressmen, publicists, and others. As would be expected, the scores on this test distribute themselves continuously according to the normal probability curve. At one extreme is found the pronounced conservative. The pronounced conservative is defined in part as the person who is hostile to the initiative and the referendum, who is favorable to bicameral legislatures, who is unsympathetic to socialized medicine, who is friendly to the chamber of commerce, who is afraid of radical propaganda, and who is opposed to governmental ownership of economic agencies. At the other end of the scale is the advanced progressive. The advanced progressive seeks constitutional revision; he favors the extension of all the devices of political democracy; he desires greater participation of workers and consumers in the determination of their economic welfare; and he wants an expansion of all forms of public service. Somewhere between these extremes is the great mass of teachers.

With reference to information, this study reports that many teachers are ignorant of the most elementary social facts. One teacher in nine thought that the *New Republic* and the *Nation* are organs of big business; 38 per cent thought that the American Federation of Labor is an ardent defender of industrial unionism; one teacher in ten believed that representatives in Congress serve six-year terms. The authors concluded that, where the past is concerned, teachers approximate the status of authorities but that, when current social problems are under consideration, they think on the level of laymen.

Teachers as a group do not appear to be more conservative than the general public. In fact, according to Raup,[2] who has made an

[1] William H. Kilpatrick (Editor), *The Teacher and Society*, pp. 174–230. First Yearbook of the John Dewey Society. New York: D. Appleton–Century Co., 1937.

[2] Bruce Raup, *Education and Organized Interests in America*, p. 209. New York: G. P. Putnam's Sons, 1936.

extensive study of the social attitudes of teachers, they are somewhat less conservative than groups of businessmen and publicists, but more conservative than the members of some other occupational groups which may be considered as molders of public opinion. For example, on religious matters they are more conservative than ministers, priests, and rabbis.

Analysis of their present social attitudes indicates that as a group teachers tend to be individualistic in their efforts to promote democracy and the general welfare. More often than not they fail to teach their pupils and students how democracy really operates. Frequently they give little or no attention to the functioning of organized groups in a democratic society or in the control of industry. They train the individual to achieve personal security but often fail to stress the interdependence of social and individual security. Emphasis is placed on adjusting the individual to his environment, on educating him to adjust himself to existing institutions, and on training him for competition instead of for co-operation.

FACTORS AFFECTING THE SOCIAL PHILOSOPHY OF TEACHERS

Because the present social philosophy of teachers as a group is far from satisfactory, it is at point to inquire into the reasons. Such an inquiry leads to the conclusion that there are two major factors responsible for the existing unsatisfactory situation: (1) the poor qualifications of the teaching personnel and (2) the lack of freedom for teachers.

The qualifications of teachers.—The type of personnel entering the teaching profession is a major factor in determining the social philosophy of teachers. There appears to be a definite relation between the social philosophy of teachers and their intelligence, as well as between their social philosophy and the amount and type of education which they have received.

The study of the John Dewey Society, previously mentioned, indicates a connection between knowledge and social attitudes.[1] In the report of this study it is stated that one of the most important findings is the positive correlation of .41 between liberal social attitudes and score on the "public problems" information test. The

[1] William H. Kilpatrick (Editor), *op. cit.*, p. 212.

greater the teacher's knowledge in the field of the social studies, the more probable it is that he will have a liberal social philosophy. In this study it was also found that the persons natively more gifted tend to be more liberal than those with less native intelligence. It is interesting to know that the liberal teacher has more factual information than the conservative teacher and also is more intelligent. Apparently liberalism is, in part, a result of superior knowledge and intelligence.

In an earlier study of social attitudes Harper[1] found a notably greater conservatism among educators with little schooling than among those with more extensive schooling. Harper's study reports a positive correlation of .52 between liberalism and the extent of formal education of teachers.

From the findings of these studies it would appear that, if it is thought desirable for teachers to have liberal social attitudes, the best way to achieve this goal is, first, to select the more intelligent individuals for entrance into the profession and, second, to raise the educational requirements for teaching. If, on the other hand, it is considered desirable to have conservative teachers, then the proper procedure would be to recruit them from the lower intelligence levels and to lower the educational requirements for teaching.

No discussion of the qualifications of teachers is adequate without comment on the curriculums and the instructional techniques of institutions for teacher education. Neither is typically such as to develop a liberal social philosophy. A desirable curriculum for teacher education would provide at least a broad general education, an adequate knowledge of the subjects to be taught, and some knowledge of the psychology of learning and of the techniques of teaching. Some institutions for teacher education do not place enough emphasis on the subjects to be taught, particularly certain teachers' colleges in their curriculums for the preparation of secondary-school teachers. Many institutions, particularly normal schools and teachers' colleges, devote too much time to the study of methods and techniques of teaching. Few higher institutions of any type place

[1] Manly H. Harper, *Social Beliefs and Attitudes of American Educators*, p. 67. Teachers College Contributions to Education, No. 294. New York: Teachers College, Columbia University, 1927.

adequate stress on a broad general education. Particularly do they fail to give sufficient attention to problems in the field of the social studies.

Prospective teachers in fields other than the social studies secure only a smattering of knowledge of economics, of sociology, and of government. The limited knowledge that they secure does not even approach adequacy for the development of a desirable social philosophy. Even those young men and women preparing to teach the social studies are usually provided with a series of isolated courses in the individual departments. Economics, sociology, and government are studied as entirely separate subjects; their interrelations are seldom adequately stressed. One of the major deficiencies of the curriculums of the teacher-training institutions is a disregard for the interdependence of knowledge in these fields. In the out-of-school world the problems that arise for solution seldom exist as separate problems of economics, of sociology, or of government. Future citizens will need to draw upon all the social disciplines for the solution of these problems. Their teachers should be equipped to prepare them for participation in community life.

It seems clear, therefore, that the general education of all prospective teachers should acquaint them with the various institutions and forces which influence modern life. A keener social consciousness needs to be developed in the rank and file of teachers, and this development can be achieved only through direct contact with present-day problems. Direct contact should not be postponed until after the close of the formal period of education; it should take place simultaneously with formal education.

Institutions for teacher preparation have been too much concerned with matters such as methods of teaching and techniques of administration. They have failed to recognize the value and the social significance of much of the information available for use. They have overlooked the fact that the era of free competition has passed and that the individual must, to an ever greater degree, operate as a member of social groups. More attention needs to be given to the social and the democratic aspects of general education.

The relations between freedom and social philosophy.—The degree of academic and personal freedom that teachers enjoy bears a direct

relation to their social philosophy, particularly insofar as this philosophy is reflected in their teaching and in their activities outside the classroom.

Any discussion of academic freedom should be prefaced by a working definition. Such a definition has been published by the National Education Association. It reads as follows:

> Academic freedom is the right of the student to learn and the right of the teacher both to teach unfettered in the classroom and to enjoy the same rights accorded to other citizens outside the classroom. The right of the student to learn includes his privilege to hear both sides of controversial questions, to be trained to distinguish between fact and opinion, and to be inspired to search for the truth. The teacher should have the right to present the various sides of controversial subjects and to give opinions, including his own, labeled as opinions.[1]

Teachers generally favor academic freedom as set forth in this definition. They recognize that teachers need freedom to teach in the classroom. Most of them have felt the need for a greater amount of participation in pedagogical activities. They also agree that teachers need a greater degree of both academic and personal liberty outside the classroom. They have been handicapped by a lack of freedom to advocate unorthodox causes or to participate freely in community life. An analysis of the forces which limit freedom of teaching and of living reveals that these include (1) the control and administration of education, (2) social pressures of a variety of types, and (3) unsatisfactory working conditions.

1. *The control and administration of education.*—The form and procedures of control and administration of education that have developed in the United States tend greatly to limit the freedom of teachers. For the most part, the members of school boards are drawn from the more favored economic classes. Almost invariably the dominant economic or political interests in each community control the educational policies of the schools and of their executives. These interests frequently tend to exaggerate the merits of the *status quo*. They usually fear and object to any teaching that favors social change. Either directly or through the boards of control or the administrative officers of the schools, they bring pressure to bear so

[1] "Department of Classroom Teachers," *Journal of the National Education Association*, XXIV (December, 1935), 280.

that teachers will limit their teaching of social problems to those of a noncontroversial nature.

Freedom cannot thrive in such an atmosphere. How can teachers feel free when they know that the way to gain favor is to agree with the administration and the lay board? All around them they see examples of salary increases and promotions for teachers whose ideas coincide with the ideas of the controlling powers. This situation not only engenders docility; it frequently results in intellectual sterility.

Political democracy has not resulted in freedom for teachers. The American educational system is not and never has been democratic. It is administered according to a pattern that is, in many ways, diametrically opposed to democracy. Planning is generally separated from performance. The teachers teach; the administrator, under the general direction of a lay board largely representative of special interests, plans the program. This system is found, not only in public elementary and secondary schools, but also in both public and private institutions of higher education. It is difficult to see how the purposes of democracy can be achieved under the existing autocratic form of educational administration.

2. *Pressure groups.*—Even more effective than the threat of dismissal or the danger of failure to be reappointed are certain social pressures brought to bear upon teachers. These pressures are subtle and come from many groups. Among those that have exerted the strongest pressures are so-called "patriotic" organizations, religious groups, and business interests.

The effects on education of the pressures of patriotic organizations may be observed in the way in which history is taught in the schools. History is taught and history textbooks are written and rewritten to serve the demands of certain elements of the public in terms of some specific situation or of some sectional or other special interest.

In discussing the pressures brought upon educators by so-called "patriotic" groups, Raup[1] states that the impact of the ardent nationalist on American social and educational development involves beliefs and attitudes on most fundamental social issues. It includes the teaching of religion, morals, economic institutions, government,

[1] Bruce Raup, *op. cit.*, p. 72.

and education. Almost without exception the attitude is one of resistance to basic change and opposition to all persons who advocate change. What the ardent nationalist wants is unthinking devotion to the institutions, the methods, and the teachings of the past.

Organized religion has also had an important influence on the curriculum of the schools, and indirectly on the social philosophy of teachers. Few persons have forgotten how, in the not far distant past, the fundamentalists started their agitation against the theory of evolution. Bills were introduced in state legislatures outlawing the teaching of evolution. During the eight years between 1921 and 1929, thirty-seven anti-evolution bills were introduced in twenty state legislatures. In three states such bills were passed, and other states adopted resolutions against the teaching of evolution. Religious pressure groups have not limited their anti-evolution activities to the promotion of legislation. They have also worked to secure revision of textbooks to eliminate all references to the theory of evolution; they have influenced state and local school boards to adopt anti-evolution rulings; they have secured the removal from libraries of books on evolution; and they have forced teachers to resign for teaching evolution.[1]

The third important pressure group affecting freedom of teaching consists of certain organized business and industrial interests. Beale[2] states that in most communities teachers have not dared to criticize the attitudes of this group on such matters as business ethics, labor policies, minimum-wage laws, the abolition of child labor, old-age pensions, or compulsory unemployment insurance. To do so would have resulted in their being labeled dangerously socialistic. Sometimes teachers are permitted to discuss the ideal theory under which men should work, but seldom are they permitted to discuss the actual conditions under which men do work.

Among the business groups that have effectively brought pressure to bear upon teachers, possibly none have been more active than certain of the public utilities. An extensive investigation of the

[1] Bruce Raup, *op. cit.*, pp. 94–95.

[2] Howard K. Beale, *Are American Teachers Free?* p. 140. Report of the Commission on the Social Studies of the American Historical Association, Part XII. New York: Charles Scribner's Sons, 1936.

propaganda activities of the public utilities in educational institutions was made a few years ago by the Federal Trade Commission. During the past fifteen years the writer has directed surveys of a large number of colleges and universities. On more than one occasion firsthand evidence was secured of the type of propaganda discovered in the investigations of the Federal Trade Commission. The activities of certain business interests to influence the curriculums of the schools and of higher educational institutions and to limit the freedom of teachers frequently represent definite attempts to mold public opinion for the benefit of special economic interests.

3. *Unsatisfactory working conditions.*—A large majority of the teachers at all educational levels work under conditions which definitely interfere with both academic and personal freedom. In many schools the teachers have too much supervision of a type that tends to curb individual initiative. They are not given adequate opportunity to deal with significant social problems. As a result, the profession tends to become devitalized.

Many excellent potential teachers refuse to enter the teaching profession because their social philosophy prevents them from accepting the conditions under which they would be compelled to work. Sometimes these conditions are merely understood; frequently they are matters of contract. For example, it may be required that the teacher shall not dance or play cards. It may be required that he be active in Sunday-school work or attend church regularly every Sunday. Knight[1] reports a case where a teacher was required to sign a contract that included a promise to sleep at least eight hours each night and another promise not to fall in love. Obviously this case is extreme, but thousands of teachers are required to sign contracts that prohibit them from leading the lives of normal citizens in the communities where they work. Clearly the negation of freedom involved in signing such contracts affects the social philosophy of the teacher. It would also be likely to prevent persons with a liberal social philosophy from entering the teaching profession.

Low salaries and insecure tenure handicap teachers in any attempt that they may wish to make to secure greater freedom. Most of

[1] Edgar W. Knight, *Education in the United States*, pp. 360–61. Boston: Ginn & Co., 1929.

them hold a one-year contract and have no other protection. Because of the low salaries, few teachers are able to save for the future. They must have work; they do not dare to risk being without a position; consequently they lack freedom.

A DESIRABLE SOCIAL PHILOSOPHY FOR TEACHERS

The question may well be raised, "What constitutes a desirable social philosophy for teachers?" My answer would be, "A liberal social philosophy, based on a high degree of social intelligence." Since, as has already been pointed out, a positive correlation exists between liberalism and intelligence and also between liberalism and education, a liberal group of teachers will tend to be more intelligent and better educated than a conservative group. Furthermore, since the social and economic *status quo* is far from satisfactory, teachers dissatisfied with present conditions are essential to the education of those who in the future must assume responsibility for solving social and economic problems.

The aims of democracy can be achieved only through positive attention to the economic and the social environment in which education functions. The teacher should be a person who is socially intelligent, who is dissatisfied with the present situation, who is possessed with an urge to improve present conditions, and who is an active and effective participant in society.

The well-qualified teacher is one who respects learning and is able to recognize propaganda; he is interested in, and intelligent about, local, state, and national politics; he has regard for the welfare of all the people, and not for some particular class or group; he actively opposes all efforts to restrict freedom of thought and freedom of speech; he is willing at all times to modify his previous beliefs. These characteristics are merely those of a good citizen, but they are fundamental for the teacher if he is to assist in educating youths to become good citizens.

THE DEVELOPMENT OF A DESIRABLE SOCIAL PHILOSOPHY FOR TEACHERS

Brief consideration will be given to the means whereby the social philosophy of teachers may be improved.

In the first place, better human material must be added to the

ranks of teachers. Institutions for teacher education must use better methods for the selection of persons who are to prepare for the teaching profession.

In the second place, the curriculums of higher institutions engaged in the education of prospective teachers must be improved. These institutions should become centers for providing young men and women with a realistic knowledge of social trends. They should give adequate consideration to the conflicts that exist within American society and among the nations. There should be no avoidance of controversial issues. The intellectual efforts of prospective teachers should be focused on current problems in the fields of economics, sociology, and government. This objective involves the teaching of all the important theories in all these fields. It means teaching the theories underlying the totalitarian state as well as those underlying democracy. Prospective teachers should be provided with a true understanding of the differences between democracy and other forms of government. Furthermore, it is as important that they study the application of the principles of democracy to industry and to education as it is that they study the application of these principles to government.

In the third place, means must be devised to secure for teachers a greater degree of academic and personal freedom. It goes without saying that academic freedom must be accompanied by a deep sense of responsibility; academic freedom should not be interpreted to include the right to advocate the use of violence to achieve social changes. It is recognized also that teaching must be adapted to the maturity of the learner. Obviously there are many things that should not be discussed with young children. Furthermore, some types of propaganda perform a worth-while function in the elementary school. For example, young children should be taught to obey the law even though teachers may believe that specific laws are unwise and should be changed. Good education for pupils in the upper levels of high school, for college students, and for adults, however, never includes deliberate propaganda, either for the *status quo* or for a *new social order*. Within the limits that I have suggested, there should be complete academic freedom.

For the securing of academic freedom, a number of actions are

necessary. All legislation relating to the content of the curriculum should be repealed. Teachers must be prepared to fight for the establishment of democratic principles in the control and administration of education, including teacher participation in the determination of educational policies. They must be prepared to fight for increased financial support for education, not for selfish reasons, but for the benefit of the children and youth to be educated. They must make a concerted effort for legal protection through adequate tenure laws, for better methods of selecting and training teachers, and for fair procedures for the adjudication of specific cases of controversy. At the same time, the public must be educated to see the advantages that will result from a greater degree of academic and personal freedom for teachers.

THE VOCABULARIES OF RECENT PRIMERS AND FIRST READERS[1]

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EARLIER reports in this journal presented basic vocabulary data on a number of primers[2] and first readers[3] published between 1923 and 1935, inclusive. Several books have appeared since those reports were prepared, and the purpose in the present article is to give comparable data on six primers and six first readers that have appeared more recently. Data are also given in Table 2 on the first reader of *The Children's Own Readers*, since the number of running words in this book was erroneously reported in the earlier article.

The procedures followed in analyzing the vocabularies of the several books were the same as those previously described. Each book was read page by page, and the repetition of each word was tallied. Every different word form was considered distinct except those formed by the addition of *s* to nouns and verbs. The words on each page were counted, and the totals were added to find the number of running words in the book. The table of contents, the concluding word list, and explanatory material for the teacher were excluded from the analysis.

The following books are included.

1. Ullin W. Leavell, Elizabeth G. Breckinridge, May Browning, and Hattie Follis, The Friendly Hour: *Ben and Alice* (Primer); *Playmates* (Book I). Chicago: American Book Co., 1935.

2. Mary E. Pennell and Alice M. Cusack, *The Children's Own Readers* (Book I). Boston: Ginn & Co., 1929.

[1] Acknowledgment is gladly made for assistance rendered through Project No. 4882 of the Works Progress Administration.

[2] John A. Hockett and Deta P. Neeley, "A Comparison of the Vocabularies of Thirty-three Primers," *Elementary School Journal*, XXXVII (November, 1936), 190–202.

[3] John A. Hockett and N. Glen Neeley, "The Vocabularies of Twenty-eight First Readers," *Elementary School Journal*, XXXVII (January, 1937), 344–52.

3. Julia Letheld Hahn, Child Development Readers: *Everyday Fun* (Primer). Boston: Houghton Mifflin Co., 1935.

4. Mildred English and Thomas Alexander, Happy Hour Readers: *Jo-Boy* (Primer); *Good Friends* (Book I). Richmond, Virginia: Johnson Publishing Co., 1935.

5. Grace E. Storm, Guidance in Reading Series: *Bob and Judy* (Primer); *Good Times Together* (Book I). Chicago: Lyons & Carnahan, 1936.

6. Mabel O'Donnell and Alice Carey, The Alice and Jerry Books: *Day In and Day Out* (Primer); *Round About* (Book I). Evanston, Illinois: Row, Peterson & Co., 1936.

7. Paul R. Hanna, Genevieve Anderson, and William S. Gray, Everyday-Life Stories, Curriculum Foundation Series: *Peter's Family* (Primer); *David's Friends at School* (Book I). Chicago: Scott, Foresman & Co., 1935, 1936.

8. Ethel Maltby Gehres, *Everyday Life with Nancy, Joe, and Ruth* (Book I). Philadelphia: John C. Winston Co., 1936.

In Table 1 are summarized important vocabulary facts for each of the six primers. The second, the third, and the fourth columns present, respectively, the number of running words; the number of different words; and the ratio of running words to different words, or the average repetition. The next eight columns present the number of words which are used in each book once, twice, three times, four times, five times, six to nine times, ten to nineteen times, and twenty times or more, respectively. The last two columns reveal for each book the percentage of words used five times or less and the percentage used ten times or more. Similar data on first readers are presented in Table 2.

Table 3 presents a comparison of the vocabulary of each of six first readers with the Gates revised word list[1] of 1,811 words. Common derived words are given the classification of the basic form. The number and the percentage of different words in each book which are found in the first five hundred of the Gates list are given in the third and the fourth columns. The numbers and the percentages of words found in the succeeding levels of the Gates list are similarly presented in the fifth to the tenth columns. The number and the percentage of words not found in the Gates list are given in the final two columns.

[1] Arthur I. Gates, *A Reading Vocabulary for the Primary Grades*. New York: Teachers College, Columbia University, 1935 (revised).

The average length of the six primers included in Table 1 is 5,279 words, which is almost exactly the same as the average of 5,275 for

TABLE 1

BASIC VOCABULARY FACTS FOR EACH OF SIX PRIMERS

Name of Primer	Total Number of Words	Number of Different Words	Average Repetition	Number of Words Used with Frequency of—								Percentage of Words Used—	
				1	2	3	4	5	6–9	10–19	20 and Up	Five Times or Less	Ten Times or More
Friendly Hour	7,371	204	36.1	...	...	...	...	4	24	69	107	2	86
Child Development	4,765	254	18.8	7	6	7	15	27	64	67	61	24	50
Happy Hour	5,092	192	26.5	...	...	...	...	5	29	77	81	3	82
Guidance in Reading	5,389	230	23.4	...	...	...	3	45	51	50	81	21	57
Alice and Jerry	5,950	222	26.8	1	7	9	8	8	35	69	85	15	69
Peter's Family	3,108	183	17.0	4	7	9	11	17	47	42	46	26	48

TABLE 2

BASIC VOCABULARY FACTS FOR EACH OF SEVEN FIRST READERS

Name of Reader	Total Number of Words	Number of Different Words	Average Repetition	Number of Words Used with Frequency of—						Percentage of Words Used—	
				1	2–5	6–15	16–25	26–39	40 and Up	Six Times or More	Sixteen Times or More
Friendly Hour	11,470	534	21.5	45	129	191	65	45	59	67	32
Children's Own	9,335	653	14.3	45	272	207	63	4	62	51	20
Happy Hour	10,069	482	20.9	7	73	241	76	43	42	84	33
Guidance in Reading	7,974	468	17.0	30	133	187	55	25	38	65	25
Alice and Jerry	10,359	470	22.0	14	149	140	60	41	66	65	36
David's Friends	6,233	331	18.8	12	78	133	51	29	28	73	33
Everyday Life	4,942	465	10.6	76	186	122	44	13	24	44	17

the 33 primers previously reported. The average number of different words, however, is but 214, which is only 71 per cent of the average of 303 words found for the 33 earlier primers, and is 78 per cent of the average of 273 different words reported earlier for 17 books published between 1930 and 1935. The smaller vocabulary

brings about an increased average repetition; for the six books in Table 1, the average repetition is 24.8 in contrast with 18.2 for the 33 earlier books.

The average length of the six first readers in Table 2 (omitting *The Children's Own Readers*, an earlier book) is 8,508 words, and the average vocabulary load is 458 different words. The corresponding values for the 28 first readers previously reported are, respectively,

TABLE 3

COMPARISON OF VOCABULARIES OF SIX FIRST READERS WITH REVISED GATES WORD LIST

Name of Reader	Number of Different Words	Words Found in Gates List								Words Not in Gates List	
		In First 500		In Second 500		In Third 500		In Fourth 311			
		Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Friendly Hour	534	377	71	93	17	20	4	13	2	31	6
Happy Hour	482	341	71	101	21	18	4	5	1	17	4
Guidance in Reading	468	319	68	91	19	24	5	5	1	29	6
Alice and Jerry	470	310	66	88	19	19	4	12	3	41	9
David's Friends	331	243	73	36	11	7	2	3	1	42	13
Everyday Life	465	303	65	70	15	28	6	10	2	54	12

9,196 and 589 words. The average vocabulary load of the six recent first readers is only 78 per cent of that of the 28 older books and is but 85 per cent of the average of 15 books published between 1930 and 1935. The average repetition in the six recent books averages 18.5, in contrast with 15.8 in the 28 earlier books. An average of 69 per cent of the words in the six recent books appear in the first five hundred of the Gates list, in contrast with 64 per cent for the 28 earlier books.

When the six first readers are compared with the six primers, it is found that the former are, on the average, 1.61 times as long and that the vocabulary of the average reader is 2.14 times as extensive as that of the average primer. In conclusion, the trend toward a more restricted vocabulary burden in both primers and first readers, indicated in the previous reports, is still in evidence.

MANUSCRIPT WRITING AND PROGRESS IN READING

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AN EXPERIMENT has been carried on for a year in two first-grade classes at Washington School, New Haven, Connecticut, for the purpose of obtaining further data on the influence that the use of manuscript writing has on progress in reading. Additional information has been secured by a comparison of the speed and the legibility of cursive and manuscript writing.

Two first-grade classes were used. The department of tests, under the direction and supervision of Norma E. Cutts, gave individual mental tests to the pupils. The Detroit First-Grade Intelligence Test, Form A, was used. The chronological ages, the mental ages, and the intelligence quotients were inspected, and the pupils were divided into two groups, of thirty-one pupils each, on the basis of these three factors. The average mental age for each of the two groups was six years and three months, and the average chronological age was six years and four months.

In one room (Group I) manuscript writing was used, and in the other (Group II) cursive writing was taught. At intervals of about two weeks the teachers moved from one class to the other in order that the teaching ability would be balanced. The teachers who carried on the experiment deserve special commendation for their willingness to change classrooms every two weeks and for their enthusiastic, unbiased, professional attitude and work.

The same method of teaching reading was used in both rooms. During September, while the classes were being tested and equated, no writing was attempted in either room, but reading and other activities were carried on as usual.

In the room where cursive writing was taught, the work in reading and writing was carried on as had been customary in previous years. The pupils were exposed to print in learning to read, but this

exposure was related to reading and not to writing. Objects around the room were labeled in both print and script as had been customary in previous years. Beginning in October, regular fifteen-minute lessons in cursive writing were given on the unruled blackboard with words related to reading and other activities. The same procedure was followed for manuscript writing, and, since the same method of reading was used in both rooms, the work attempted in writing was practically identical, particularly during the early part of the experiment.

After three months of instruction a test was given to show the legibility of each kind of writing. The sentence, "We like to play," was written on the blackboard and copied three times by the pupils. The Metropolitan Primary Cursive and Manuscript Handwriting Scales were used in scoring the papers. Five persons rated the papers independently, and the average of the five ratings was computed. The average legibility score for manuscript writing was 54.4; for cursive writing, 42.3.

In another school (Group III), where manuscript writing had been used in Grade I for several years, the work of a group of pupils having the same average mental ability as those in the test classes was compared with the work where the teachers changed classes and taught both manuscript and cursive writing. The first test showed an average legibility of 58.4, or 4.0 points in advance of manuscript writing under the test conditions.

After an interval of five months, in the month of May, tests of reading ability were given, and the tests for speed and legibility were repeated. The results are shown in Table 1. For measuring ability in reading the Gates Primary Reading Test, Form I, Types 1, 2, and 3 were used.

It is realized that positive conclusions should not be drawn from any experiment in which time and the number of participants are limited. It is believed, however, that the results point toward an advantage for manuscript writing in initiating writing. The results show distinctly that during the first three months pupils can master manuscript more readily than they can learn cursive writing. Between the first and the final test the cursive writers made more progress than did the manuscript writers, but the cursive writers did

not overtake the scores of the manuscript writers. The reading-test results show that there is some advantage in exposing beginners to print exclusively as against using both cursive and print writing.

In addition to the objective results obtained, the subjective judgments of these and other teachers are worthy of consideration. Both teachers who carried on the experiment were eager to continue using manuscript writing. In five other schools where manuscript writing has been used in Grade I for the past five years, the teachers believe

TABLE 1

RESULTS MADE ON TESTS OF HANDWRITING AND READING BY THREE GROUPS OF FIRST-GRADE PUPILS

Group	Average Score on Legibility of Handwriting			Number of Letters Written a Minute in May	Average Reading Age in May
	Test 1 (December)	Test 2 (May)	Gain		
Group I (manuscript)....	54.4	63.2	8.8	25.3	7.6
Group II (cursive).....	42.3	57.0	14.7	22.0	7.4
Group III (manuscript)*.	58.4	69.0	10.6	27.0	7.8

* Group III had had one more month of instruction and practice in handwriting than the other groups.

that it aids in reading, spelling, and the expression of ideas. No teacher has asked to return to cursive writing.

There is more evidence showing the advantage of using manuscript writing with beginners than there is showing the best time to change to cursive writing. It has been thought best to change during the second year. To continue manuscript writing until habits become fixed appears unwise, for it has been observed that, where a change was made after three or more years, an undue stressing of cursive writing was necessary. The time to change depends on the amount of writing accomplished in the first year. If little writing is attempted in Grade I, manuscript writing should be continued through Grade II in order that the benefits to reading and to written expression may be fully secured. In this experiment rather a large amount of writing was done in the first year, and it has, consequently, been thought best to make the change in Grade II.

TYPES OF MATERIALS, VOCABULARY BURDEN WORD ANALYSIS, AND OTHER FACTORS IN BEGINNING READING. II[1]

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*

EXTENDED VERSUS RESTRICTED VOCABULARY

A STUDY of the methods and the materials[2] used in the classes showed that in some of the control groups pupils read a wide variety of books, bulletin-board announcements, experience stories, and other materials. In other classes the materials were selected and somewhat restricted, motivated re-reading and re-use of practice-book material was employed, and in other ways the work was confined to a smaller total vocabulary. In two experimental groups reading of supplementary materials was combined with some work with the mimeographed material. The pupils were, therefore, rearranged into three groups: Group A, those introduced to the largest number of different words; Group B, those introduced to a medium number of different words; and Group C, those introduced to the smallest number of different words. The three groups were approximately equivalent in scores on the reading-readiness test and in mental age and contained equal numbers of boys and girls. The results are shown in Table 2.

In the case of the entire groups, the largest differences in the scores of Groups A, B, and C appeared in the two tests based on the

[1] The first part of this article appeared in the September, 1938, number of the *Elementary School Journal.*

[2] The methods and the materials used in a class were determined chiefly by study of the teacher's own reports and records and the information supplied by her in a questionnaire filled out after the completion of the term. Notes kept by Russell based on his observations of the teacher's work were also consulted. The final description of a particular teacher's program, used in this and subsequent sections, is subject to such errors as commonly exist in an appraisal of this kind.

TABLE 2

COMPARISON OF READING ACHIEVEMENT OF FIRST-GRADE PUPILS CLASSIFIED ACCORDING TO SCORES ON METROPOLITAN READINESS TESTS AND ACCORDING TO NUMBER OF DIFFERENT WORDS MET IN READING

Classification	Group A (Introduced to Largest Number of Different Words)	Group B (Introduced to Medium Number of Different Words)	Group C (Introduced to Smallest Number of Different Words)
Number of cases:			
Reading-readiness scores of 85 and above	17	17	17
Reading-readiness scores of 70–84.....	21	21	21
Reading-readiness scores below 70.....	24	24	24
Entire group.....	62	62	62
Mean mental age (in months):			
Reading-readiness scores of 85 and above	82.7	83.0	82.8
Reading-readiness scores of 70–84.....	80.4	80.7	81.1
Reading readiness-scores below 70.....	74.4	73.9	73.8
Entire group.....	77.9	78.1	78.2
Mean score on Metropolitan Readiness Tests (September, 1936):			
Reading-readiness scores of 85 and above	92.8	92.6	92.8
Reading readiness scores of 70–84.....	78.3	78.3	78.6
Reading-readiness scores below 70.....	52.7	52.8	52.7
Entire group.....	76.1	76.2	76.3
Mean reading grade on Gates Primary Reading Test, Type 1, Word Recognition (February, 1937):			
Reading-readiness scores of 85 and above	1.90	1.91	1.80
Reading-readiness scores of 70–84.....	1.76	1.80	1.84
Reading-readiness scores below 70.....	1.51	1.58	1.67
Entire group.....	1.66	1.75	1.77
Mean reading grade on Gates Primary Reading Test, Type 3, Paragraph Reading (February, 1937):			
Reading-readiness scores of 85 and above	1.84	1.90	1.79
Reading-readiness scores of 70–84.....	1.67	1.72	1.73
Reading-readiness scores below 70.....	1.47	1.51	1.58
Entire group.....	1.65	1.73	1.77
Mean score on test of vocabulary of basal materials, word recognition (February, 1937):			
85 and above	29.9	30.4	30.1
70–84.....	27.2	28.3	30.1
elow 70.....	22.4	25.3	26.5
Entire group.....	26.5	28.4	29.1

TABLE 2—*Continued*

Classification	Group A (Introduced to Largest Number of Different Words)	Group B (Introduced to Medium Number of Different Words)	Group C (Introduced to Smallest Number of Different Words)
Mean score on test of vocabulary of basal materials, paragraph reading (February, 1937):			
[illegible] of 85 and above	15.1	15.3	14.8
[illegible] of 70–84.....	13.1	14.4	15.1
[illegible] below 70.....	9.1	9.6	11.0
Entire group.....	12.7	13.7	14.6

words in the vocabulary of the basal materials which were studied by all children. The pupils whose reading was most confined to a common vocabulary (Group C) scored higher both in word recognition and in paragraph comprehension. In word recognition the difference between the extremes (Groups A and C) was 2.6, nearly twice the standard error of the difference (1.4). In paragraph comprehension the difference between Groups A and C was 1.9, a little less than twice the standard error of the difference (1.2). In the Gates standardized test, which includes many words taught to neither group, the differences, though not highly reliable, favored the smaller vocabulary loads. The difference between Groups A and C is approximately one-tenth of the normal progress in reading during a year.

The pupils available for this comparison were divided into three groups according to the initial reading-readiness scores. When consideration is given to the scores of these three groups, it appears that the pupils who had the highest reading-readiness scores were little influenced by the range of reading vocabulary offered to them. Although the differences among the test scores were unreliable, it may be noted that in all four reading tests the pupils in the high reading-readiness group who were given the medium amount of diversity in their supplementary reading obtained the highest reading scores. In the case of the pupils of medium reading-readiness scores, the highest reading scores in the four tests were obtained by those whose

activities were restricted to the smallest vocabulary. In the case of the pupils of lowest reading-readiness scores, there was a clear tendency for reading scores to be higher as the total mass of reading activities was conducted in the smallest vocabularies. Contrariwise, those of lowest reading readiness were less successful when they were confronted with a heavy vocabulary in a great variety of different books, bulletin-board announcements, experience stories, and other materials. It is a fair assumption that, in the case of these pupils, new words appeared more rapidly than at the optimum rate and that consequently both word recognition and comprehension suffered.

VALUE OF PHONICS AND WORD ANALYSIS

It was apparent that, although all the classes used the same basal materials, there were differences in the amounts and the kinds of word analysis and phonic activities employed. At the one extreme was a class in which a fairly extensive plan of conventional phonetic drill was introduced; at the other, a class in which little work in word analysis, strictly speaking, was used. A number of the teachers employed a rather large amount of word analysis, such as discussing the general features of words (initial and final letters or phonograms), noticing common parts of words (syllables, double letters, etc.), finding little words in bigger ones, comparing the features of words which were confused with one another, having each pupil build up his own groupings or families based on some common element, and contrasting reversed words ("was" and "saw," for example). These activities differ from conventional phonics, in which the main procedure is to study isolated letters and phonograms, build up words from these, and to train diligently on translating letters into letter sounds after having studied the sound equivalents of the letters.

The pupils were assembled in three groups according to the type of training: Group D, those who received the smallest amount of phonics or word analysis; Group E, those who were given moderate amounts of informal, newer-type word analysis, comparisons, etc.; and Group F, those who had substantial or large amounts of conventional phonetic drill. The results are shown in Table 3.

In the case of the scores for the entire groups, although the dif-

ferences were not marked nor highly reliable, Group E had the highest scores in all the tests of word recognition and comprehension, and Group D exceeded Group F slightly in two of the four, being equal in the other two. The activities used with Group E were, in the main, examples of more recent, informal exercises in comparing, studying, and analyzing word forms. It is significant that the scores of the pupils in that group exceeded those in the groups employing the more conventional or formal phonetic drills by slightly more than one-tenth of a grade in the Gates standardized tests of both comprehension and word recognition. A program including little or no phonetic or word-analysis activities in the first year is not as good as the informal program but is at least as good as one containing large amounts of formal phonetic work.

In the case of the group highest in reading-readiness scores, the moderate, modern program of word analysis gave the highest average scores in reading and word recognition, but it barely exceeded the minimum word-analysis program, which in turn had a very slight advantage over conventional phonics. Since the differences have low reliability, the indication is that it matters little which type or how much phonics is taught to the ablest pupils during the first year but that a moderate amount of the newer, more informal types of word analysis is most promising. The average pupils (those of intermediate reading-readiness scores) appear more clearly to secure greater benefit from this type of experience and to profit least from the conventional, formal phonics. The pupils of lowest reading-readiness scores show this trend still more clearly. A moderate amount of informal word analysis is helpful; very little of this type seems to be better than large amounts of formal phonetic drill. The latter apparently does not "take" well when taught to children of low readiness scores.

PROGRAMS AS A WHOLE

The reading scores obtained in the nine classes showed clear differences. For example, the reading grade in the Gates paragraph-reading test for the top class was 1.91 and for the bottom 1.45, a difference of almost one-half of a grade's progress. This difference is a large one to be obtained by the middle of the first year. These dif-

TABLE 3

COMPARISON OF READING ACHIEVEMENT OF FIRST-GRADE PUPILS CLASSIFIED ACCORDING TO SCORES ON METROPOLITAN READINESS TESTS AND ACCORDING TO AMOUNT AND KIND OF PHONETIC INSTRUCTION

Classification	Group D (Given Smallest Amount of Phonics)	Group E (Given Moderate Amount of Informal Word Analysis)	Group F (Given Large Amount of Conventional Phonics)
Number of cases:			
Reading-readiness scores of 85 and above	17	42	15
Reading-readiness scores of 70–84.....	20	56	20
Reading readiness scores below 70.....	20	48	16
Entire group.....	57	146	51
Mean mental age (in months):			
Reading-readiness scores of 85 and above	82.0	82.1	82.4
Reading-readiness scores of 70–84.....	80.2	80.5	80.7
Reading-readiness scores below 70.....	74.5	74.1	74.9
Entire group.....	78.0	77.9	78.3
Mean score on Metropolitan Readiness Tests (September 1936):			
Reading-readiness scores of 85 and above	92.6	92.5	92.2
Reading readiness scores of 70–84.....	78.2	78.4	78.5
Reading-readiness scores below 70.....	52.9	52.8	53.2
Entire group.....	76.4	76.3	76.1
Mean reading grade on Gates Primary Reading Test, Type 1, Word Recognition (February, 1937):			
[illegible] of 85 and above	1.88	1.92	1.87
[illegible] of 70–84.....	1.76	1.85	1.73
[illegible] below 70.....	1.55	1.68	1.54
Entire group.....	1.77	1.83	1.71
Mean reading grade on Gates Primary Reading Test, Type 3, Paragraph Reading (February, 1937):			
Reading-readiness scores of 85 and above	1.85	1.88	1.82
Reading-readiness scores of 70–84.....	1.68	1.73	1.66
Reading-readiness scores below 70.....	1.54	1.56	1.47
Entire group.....	1.69	1.75	1.61
Mean score on test of vocabulary of basal materials, word recognition (February, 1937):			
Reading-readiness scores of 85 and above	29.8	29.8	28.4
Reading-readiness scores of 70–84.....	28.8	30.1	28.3
Reading-readiness scores below 70.....	24.4	26.4	23.7
Entire group.....	27.6	29.6	27.7

TABLE 3—*Continued*

Classification	Group D (Given Smallest Amount of Phonics)	Group E (Given Moderate Amount of Informal Word Analysis)	Group F (Given Large Amount of Conventional Phonics)
Mean score on test of vocabulary of basal materials, paragraph reading (February, 1937):			
Reading-readiness scores of 85 and above	15.2	15.1	14.8
Reading-readiness scores of 70–84.....	14.4	14.8	13.7
Reading-readiness scores below 70.....	10.2	10.4	9.2
Entire group.....	13.5	14.1	13.5

ferences were due to inequalities in the abilities (mental age and reading readiness) of the pupils and to variations in the teachers' skill, as well as to other factors. All such factors for a class cannot be equated nor canceled out by class comparison of the total programs, but it was possible to eliminate pupils until the nine classes were equivalent in scores on the intelligence and the reading-readiness tests.

Pupils were eliminated until the means and the standard deviations in the mental age and the reading-readiness scores of the classes differed by negligible amounts. The scores were then assembled, and the standard deviations were computed for each of the four reading tests. The mean scores for the classes given in the following summaries are standard deviations, that is, the amount (in terms of hundredths of the standard deviation) by which the mean scores for the four tests exceeded (+) or fell below (−) the mean of the total population of the nine classes. Following are brief characterizations of the instruction in these classes taken in order from the class with the highest to that with the lowest standard-deviation score on the reading tests.

Class A. Average reading score, +.40 S.D.

1. Used the mimeographed material as much as seemed advisable for particular pupils.
2. Other reading materials (books, bulletin board, etc.) were rigidly selected or edited to introduce new words no more rapidly than particular pupils were able to handle them.

3. Oral reading confined to material previously read silently.
4. Moderate use of word-study games.
5. Moderate use of informal word analysis.

Class B. Average reading score, +.38 S.D.

1. Almost the same program as for Class A except that Class B was a control group and did not have the mimeographed material. Employed considerable re-use of the practice-pad materials for slower learners.

Class C. Average reading score, +.28 S.D.

1. Very similar to program for Class A. Used the mimeographed material more extensively and uniformly. Used phonics rather more fully and more formal oral-reading activities, including occasional sight reading.

Class D. Average reading score, +.25 S.D.

1. Very similar to program for Class B. Class D was a control group not using the mimeographed material. Used less phonics or informal word-analysis work with more word-recognition games.

Class E. Average reading score, +.06 S.D.

1. An experimental group using the mimeographed material plus other reading of varied types resulting in fairly substantial additions to vocabulary.
2. Very little phonics or word analysis.
3. Considerable time spent in related projects involving nonreading activities.

Class F. Average reading score, +.06 S.D.

1. Used the mimeographed material. Very similar to Class E, except that a great deal of conventional phonics and relatively few projects were used.

Class G. Average reading score, −.24 S.D.

1. Used the mimeographed material, considerable experience reading, much oral reading for practice purposes, much formal phonics.

Class H. Average reading score, −.40 S.D.

1. A control group not using the mimeographed material. Employed a considerable amount of diverse reading matter.
2. Emphasis on drill in phonics and oral reading.

Class I. Average reading score, −.76 S.D.

1. A control group. Children undertook supplementary books with little guidance. Considerable experience reading with little editing of material.
2. Used word and phrase cards with wall pocket.
3. Used considerable formal phonics.

Although study of the programs conducted in these individual classes, only briefly suggested above, was illuminating, the more general features may be suggested by grouping them.

1. *High final scores.*—Classes A, B, C, and D may be grouped together. Certain common features of the program used by the teachers in these classes are as follows:

a) All these teachers, in order not to bewilder the pupils with too many new words, exercised restrictions on the total range of material offered. They strove to secure a generous amount of re-reading of the words considered basal. In most cases words outside the vocabulary of the basal textbooks were, within limits, considered "basal." These teachers tried to make possible an abundance of reading of material which contained few or no unfamiliar words.

b) In these classes an effort was more clearly made to adjust the material, the reading, the related activities, and the vocabulary burden to the pupils. In this group were two teachers who refused to put every child through the entire amount of the supplementary mimeographed material.

c) These teachers used bulletin-board announcements; blackboard and chart work; "experience" and other oral compositions for reading; supplementary books; and artistic, dramatic, and other projects. They carefully edited or controlled the number of new words appearing in these materials and critically considered the individual pupils in the various types of activities.

d) These teachers exercised special caution before having pupils read orally before the group materials that they had not previously read. Oral sight reading was rarely or never used for mere purposes of drill.

e) These teachers used moderate amounts of word-recognition games but rarely employed word-form pronunciation drills unrelieved by correlated interest-producing features.

f) All these teachers used moderate amounts of the newer types of informal word-analysis activities, such as comparing words which have been confused or which contain common factors or tend to be read in reverse, noting features within words, finding small words in larger, and making families from words already known. In no case

was word analysis omitted, and in none was the conventional, formal phonetic drill employed.

2. *Average final scores.*—The two classes (E and F) which finished the term with average reading scores used the material of the workbook type. The programs for these two classes were similar to each other but presented the following differences from the programs characteristic of the first group:

a) They used the mimeographed material more fully.

b) They brought in other reading matter with less concern about its vocabulary, with a resulting heavier vocabulary burden.

c) There was less adjustment to individual abilities and interests.

d) They used different methods of word analysis. Class E employed a minimum of any kind, and Class F used formal phonetics.

3. *Low final scores.*—The classes with the lowest reading ability (Classes G, H, and I) included one which used the mimeographed material and two control groups. The main distinguishing features of the work in these three classes were as follows:

a) A relatively large amount of varied reading material, that is, a large total vocabulary.

b) Greater disposition to teach the class instead of individuals or small groups of similar abilities or needs.

c) More emphasis on formal phonetic drill.

d) More formal treatment of oral reading.

e) In two classes at least (H and I), there was a tendency to combine rather extreme devices, such as much free, undirected reading of diverse materials and oral sight reading before the class; some interesting word games and formal phonetic drill. These classes gave the impression of having a great variety of activities which were less well integrated and related than those used in the other groups. The main things to be taught were less clearly brought to the fore; the pupils more frequently seemed confused or uncertain concerning what, exactly, they should learn.

It must be recalled that these comparisons are relative. Even the lowest class scores were good, while the average exceeded the standards for the grade position and the highest were remarkably high.

SELECTED REFERENCES ON ELEMENTARY-SCHOOL INSTRUCTION

II. The Subject Fields

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THIS list of references is the second in a series of three lists relating to instruction at the elementary-school level. The preceding list, appearing in the September number of the *Elementary School Journal*, contains items on the curriculum, methods of teaching and study, and supervision. The present list and the next list in the series include references on these same major aspects of instruction, but the items are grouped by subject fields.

READING[1]

William S. Gray
University of Chicago

429. Arbuthnot, May Hill. "What, Reading Aloud!" *Childhood Education*, XIV (November, 1937), 118–24.

Discusses certain results of the recent emphasis on silent reading and considers two remedies.

430. Bennett, H. K. "A Remedial Program in Reading Involving the Development of the Basic Study Skills and Their Application to the Content Subjects." Circular No. 78, 1937. Des Moines, Iowa: State Department of Public Instruction, 1937. Pp. 28 (mimeographed).

Presents the results of a remedial-reading program in Grades V–VIII, inclusive, and outlines a pattern for a remedial program in work-type reading.

431. Berglund, Albert O. "A Reading Vocabulary for the Fourth Grade," *Journal of Educational Research*, XXXI (November, 1937), 172–80.

Discusses the need for more adequate vocabulary lists and reports the methods used and samples of the results obtained in an analysis of six basal readers, five books of fiction, four social-science textbooks, and one arithmetic.

432. Betts, E. A., and Others. "Challenging the Learner," *Elementary English Review*, XV (April, 1938), 149–58.

[1] See also Item 393 (Washburne and Morphett) in the list of selected references appearing in the September, 1938, number of the *Elementary School Journal*.

Describes the work of the 1937 Summer Session Reading Clinic at the State Normal School, Oswego, New York, including records of the progress made by the pupils who attended.

433. BONEY, C. DEWITT. "Basal Readers," *Elementary English Review*, XV (April, 1938), 133–37.

Challenges the place accorded basal readers in *The Teaching of Reading: A Second Report* (Thirty-sixth Yearbook of the National Society for the Study of Education). Summarizes evidence concerning the practices in several cities and the achievement of pupils in schools not using basal readers.

434. COLE, LUELLA. *The Improvement of Reading—With Special Reference to Remedial Instruction.* New York: Farrar & Rinehart, Inc., 1938. Pp. xii+338.

Discusses basic reading problems in the light of three guiding principles: "First, it is based on objectively proven facts. . . . . Second, it is practical: only those matters that are of immediate use to a teacher have been included. Third, it is unbiased."

435. DURRELL, DONALD D., and SULLIVAN, HELEN BLAIR. "Vocabulary Instruction in the Intermediate Grades," *Elementary English Review*, XV (April and May, 1938), 138–45, 160; 185–98.

Discusses the importance of vocabulary instruction; considers the two types of vocabulary "possessed by each individual: vocabularies involving the intake of ideas, and vocabularies concerned with the output of ideas"; presents vocabularies for Grades IV, V, and VI derived from counts of books used in each grade; and discusses problems involved in vocabulary instruction.

436. DYER, CLARA AXIE. "A Plan for a Remedial Reading Program," *Elementary English Review*, XV (April and May, 1938), 146–48, 158; 179–84.

Discusses principles and assumptions underlying remedial instruction in reading and presents numerous practical suggestions for promoting growth among deficient readers.

437. FITZGERALD, JAMES A. "A Diagnostic and Remedial Program in Reading," *Educational Method*, XVII (February, 1938), 221–25.

Describes the diagnostic and remedial program in reading in Grades IV–VIII, inclusive, of the Walsh Elementary School, Chicago.

438. GATES, A. I. "Experimental Data on Certain Problems in Teaching Reading," *Practical Values of Educational Research*, pp. 77–82. Official Report of the American Educational Research Association, 1938. Washington: American Educational Research Association of the National Education Association, 1938.

Summarizes the results of six investigations, as yet unpublished, of types of reading problems.

439. GRAY, WILLIAM S. "The Nature and Extent of the Reading Problem in American Education," *Educational Record*, Supplement No. 11, XIX (January, 1938), 87–104.

Emphasizes the need for greater efficiency in reading in contemporary life and discusses both the developmental and the remedial problems which schools face today.

440. GRAY, WILLIAM S. "The Place of the Library in the New Education," *Alumni Quarterly*, XXVII (February, 1938), 5–7. Normal, Illinois: Illinois State Normal University.

Describes activities observed in two libraries and discusses the broader functions which the library may serve in the education of children.

441. GRAY, WILLIAM S. "Summary of Reading Investigations (July 1, 1936, to June 30, 1937)," *Journal of Educational Research*, XXXI (February, 1938), 401–34.

Summarizes significant findings and conclusions of ninety-five published investigations relating to reading.

442. GRAY, WILLIAM S., with the co-operation of DONALD D. DURRELL, ARTHUR I. GATES, ERNEST HORN, and PAUL MCKEE. "Special Methods and Psychology of the Elementary-School Subjects: Reading," *Review of Educational Research*, VII (December, 1937), 493–507, 562–67.

Summarizes investigations relating to the psychology and methods of teaching reading in elementary schools published between July, 1934, and June, 1937.

443. GRAY, WILLIAM S., and HOLMES, ELEANOR. *The Development of Meaning Vocabularies in Reading*. Publications of the Laboratory Schools of the University of Chicago, No. 6. Chicago: Department of Education, University of Chicago, 1938. Pp. xii+140.

Summarizes previous studies relating to the nature and the development of meaning vocabularies and presents the results of an investigation to determine the relative effectiveness of direct and incidental methods of teaching the meanings of words in fourth-grade history.

444. HEGGE, THORLEIF G. "The Problem of Reading Deficiency in the Mentally Handicapped," *Journal of Exceptional Children*, IV (March, 1938), 121–25.

Discusses issues relating to the educability of mentally handicapped children and recommends desirable procedures in the case of reading.

445. HILLIARD, GEORGE H. "Reading and Literature," *What Does Research Say?* pp. 108–16. Bulletin No. 308. Lansing, Michigan: State Department of Public Instruction, 1937.

Summarizes the contributions of research to the answers to twenty-two questions relating to reading instruction.

446. HOCKETT, JOHN A. *The Vocabularies and Contents of Elementary School Readers*. Department of Education Bulletin No. 3. Sacramento, California: State Department of Education, 1938. Pp. viii+104.

Presents comparative data concerning the vocabulary burden of a large number of commonly used readers in the primary grades and a classified index of

the contents of 218 school readers ranging in difficulty from primers to sixth readers.

447. JANTZEN, J. MARC. "A Study of the Relative Values of Two Types of Vocabulary Tests in Measuring Reading Vocabulary," *University of Kansas Bulletin of Education*, IV (March, 1938), 50–52.

Compares the scores of seventy high-school pupils on two equivalent vocabulary tests, one measuring "context meaning" and the other "word meaning."

448. LAZAR, MAY. *Reading Interests, Activities, and Opportunities of Bright, Average, and Dull Children.* Teachers College Contributions to Education, No. 707. New York: Teachers College, Columbia University, 1937. Pp. 128.

Summarizes and interprets data from pupils who had been in school for seven, eight, nine, or ten terms and distributed in Grades II A to VIII B, inclusive.

449. MCKEE, PAUL. "Word Lists and Vocabulary Difficulty in Reading Matter," *Elementary English Review*, XIV (November, 1937), 241–45.

Challenges the assumption that, because the words of a book or an article are among the most important of a noteworthy word list, the vocabulary is certain to be within the understanding of children for whom it is intended.

450. MONROE, MARION. "Diagnostic and Remedial Procedures in Reading," *Educational Record*, Supplement No. 11, XIX (January, 1938), 105–13.

Describes three aspects of a successful remedial program and the procedures adopted in diagnosing and meeting the needs of seriously retarded readers in the Pittsburgh schools.

451. PARKER, BERTHA M. "Reading in an Intermediate-Grade Science Program," *Elementary School Journal*, XXXVIII (September, 1937), 38–43.

Describes the recognized goals of an intermediate-grade science course and the types of reading material helpful in attaining them.

452. REED, EDNA. "Some Experiences with Children and Their Books," *Educational Method*, XVII (January, 1938), 170–75.

Emphasizes the need for guidance, as well as access to all types of reading material, in promoting reading interests.

453. ROBINSON, HELEN M. "The Study of Disabilities in Reading," *Elementary School Journal*, XXXVIII (September, 1937), 15–28.

Describes the methods used in the diagnosis and the remedial treatment of reading-disability cases in the Orthogenic School of the University of Chicago.

454. STANGER, MARGARET A., and DONOHUE, ELLEN K. *Prediction and Prevention of Reading Difficulties.* New York: Oxford University Press, 1937. Pp. xii+192.

Discusses the neurological basis of reading difficulties, describes tests appropriate for use in diagnosing cases due to such defects, and outlines therapeutic measures.

455. STONE, CLARENCE R. *Better Advanced Reading*. St. Louis, Missouri: Webster Publishing Co., 1937. Pp. xii+292.

Outlines a modern program in reading above the primary grades. Treats objectives, methods, activities, and materials.

456. THOMPSON, EDYTH. "An Individualized Reading Plan," *Chicago Schools Journal*, XIX (January–February, 1938), 97–106.

Presents a detailed account of a reading program with an eighth-grade class, involving diagnosis and individualized treatment, together with evidence of the results secured.

457. WETZEL, NAOMA. "The News at Eleven—A Report after Three Weeks of School," *Educational Method*, XVII (January, 1938), 185–88.

Describes the plans adopted by eleven-year-old boys and girls to find out what was going on in the world and the enriching experiences which resulted.

458. WILKINSON, HELEN S. S., and BROWN, BERTHA D. *Improving Your Reading*. New York: Noble & Noble, 1938.

Contains numerous types of exercises and activities for improving the efficiency of poor readers in Grades V–VIII, inclusive.

459. WITTY, PAUL A. "Evaluating the Language Arts—Reading," *Educational Trends*, VI (February–March, 1938), 14–17.

Criticizes the use of extremely analytical and mechanical methods with inefficient readers and outlines a more functional type of training which should be provided.

460. WITTY, PAUL A. "Reading for Meaning," *English Journal*, XXVII (March, 1938), 221–29.

Emphasizes vigorously the importance of cultivating thoughtful reading habits and considers desirable modifications in current school practice if this goal is to be attained.

461. WITTY, PAUL, and KOPEL, DAVID. "The Use of Book-Lists and Tests in Guiding Children's Reading," *Elementary English Review*, XV (May, 1938), 167–69.

Offers practical suggestions for directing the reading activities of pupils.

462. ZELIGS, ROSE. "What Sixth Grade Children Are Reading," *Elementary English Review*, XIV (November, 1937), 257–62.

Considers the factors which sixth-grade children consider in choosing a book and presents a list of the books most frequently read voluntarily by pupils at this level of advancement.

ENGLISH[1]

DORA V. SMITH
University of Minnesota

463. BARUCH, DOROTHY W. "Creative Language of Kindergarten Children," *Elementary English Review*, XIV (December, 1937), 288–92.

Presents, with illustrations, a comprehensive discussion of five stages in conscious creative production.

464. BOWER, VIOLA. "An English Unit in Biography for the Upper Grades," *Elementary School Journal*, XXXVIII (December, 1937), 272–77.

Outlines a practical plan for the development of oral and written expression in Grade VII through an extensive-reading program designed to arouse enthusiasm for biography.

465. BOYCE, IDELLE, and FALK, ETHEL MABIE. "Judging by Results," *Childhood Education*, XIV (January, 1938), 200–205, 234.

Stresses trends in language-teaching, dangers in the new program, and recognition of language standards for language activities. Gives an illustrative classroom experiment and its results.

466. CONRAD, LAWRENCE H., with the CREATIVE WRITING COMMITTEE OF THE COMMISSION ON THE SECONDARY SCHOOL CURRICULUM OF THE PROGRESSIVE EDUCATION ASSOCIATION. *Teaching Creative Writing*. New York: D. Appleton–Century Co., Inc., 1937. Pp. xii+142.

Emphasizes the importance of an experiential basis for sincerity in expression of one's own impulses and sets up standards for criticism, with illustrative samples for evaluation.

467. COTNER, EDNA. "English in a Fused Curriculum," *Elementary English Review*, XV (January, 1938), 11–14.

Discusses briefly the advantages of planned versus incidental teaching of English.

468. DAVIS, EDITH A. *The Development of Linguistic Skill in Twins, Singletons with Siblings, and Only Children from Age Five to Ten Years*. Institute of Child Welfare Monograph Series, No. XIV. Minneapolis, Minnesota: University of Minnesota Press, 1937. Pp. x+166.

Presents an investigation of the language development of 436 children from the ages of five and one-half to nine and one-half as measured by (1) clarity of articulation; (2) length of sentence; (3) functional purpose; (4) complexity and accuracy of sentence structure; and (5) frequency, function, and length of the words used.

[1] See also Item 192 (Goodykoontz) in the list of selected references appearing in the April, 1938, number of the *Elementary School Journal* and Item 399 (Netzer) in the September, 1938, number of the *Elementary School Journal*.

469. DAWSON, MILDRED A. "Elementary School Language Textbooks," *Elementary English Review*, XV (March and May, 1938), 83–90, 199–202.

A report of a committee of the National Conference on Research in English. Summarizes studies on the textbook in elementary English and presents evidence concerning what teachers want in textbooks and the manner in which they use materials available in textbooks.

470. DE BOER, JOHN J. "Book Week Activities," *English Journal*, XXVI (October, 1937), 632–40.

Summarizes suggestions for Book Week celebrations, presented by *Journal* readers, in the form of projects centering in oral and written activities.

471. DRIGGS, HOWARD R. "Language—A Living Force in Education," *Journal of the National Education Association*, XXVI (September, 1937), 197–204.

A group of four articles setting forth concretely the basic principles of developing skill in composition.

472. FALK, ETHEL MABIE. "Language for Today's Children," *Education*, LVIII (October, 1937), 74–79.

Discusses the need of direct instruction in language adapted to social objectives and varying with social needs.

473. GREENE, HARRY A. "Principles of Method in Elementary English Composition," *Elementary English Review*, XIV (May, October, November, and December, 1937), 189–93, 219–26, 267–72, 304–9. (Discussions by R. L. Lyman and Ethel M. Falk, ———, XV [January, 1938], 29–36.)

Summarizes those principles of classroom teaching of English which are supported by the most recent experimental evidence available.

474. GREENE, HARRY A., with the co-operation of R. L. LYMAN, L. J. O'ROURKE, and DORA V. SMITH. "Special Methods and Psychology of the Elementary-School Subjects: English Language," *Review of Educational Research*, VII (December, 1937), 474–81, 554–57.

A review of trends in method in English-teaching as reflected in sixty-seven studies published from July 1, 1934, to July 1, 1937.

475. HANLON, HELEN J. "Using Community Resources in the English Class," *English Journal*, XXVI (October, 1937), 612–18.

Presents practical suggestions for vitalizing the English program through use of community resources, with Detroit as an illustration.

476. HEFFERNAN, HELEN, and POTTER, GLADYS L. "Adapting Curriculum to the Small Rural School," *Educational Method*, XVII (November, 1937), 51–59.

Contains useful, practical suggestions and philosophy for adapting newer procedures to the rural-school situation.

477. HOOVER, AUDREY. "Functional Grammar," *Clearing House*, XII (February, 1938), 365–68.

Emphasizes development of thought and content as opposed to the placing of undue stress on form in writing and speaking. Cites evidence from experimental studies of the value of teaching grammar.

478. JEWETT, IDA A. "Simples from a Composition Reader's Scrip," *Teachers College Record*, XXXIX (October, 1937), 16–24.

Makes a vigorous plea for constructive and discriminating criticism as opposed to meticulous correction of errors in composition.

479. LEONARD, J. PAUL. "Language in the Virginia Curriculum," *English Journal*, XXVI (October, 1937), 618–25.

Discusses the philosophical and the sociological bases for selection and classification of language activities in the integrated curriculum of Virginia.

480. LEWIS, CLAUDIA. " 'Deep as a Giant'—An Experiment in Children's Language," *Childhood Education*, XIV (March, 1938), 314–15.

Describes significant and suggestive devices for developing imaginative concepts in young children.

481. MILLIGAN, JOHN P. "The English Expression Program in the Bloomfield, New Jersey, Public Schools," *Elementary English Review*, XV (January, 1938), 5–10.

Presents objectives, basic assumptions, standards in writing, and teaching helps for a year's experiment in English expression.

482. RAUBICHECK, LETITIA. *How To Teach Good Speech in the Elementary Schools*. New York: Noble & Noble, 1937. Pp. x+276.

Offers helpful suggestions for voice-training and basic techniques for securing good speech and accuracy in pronunciation of English sounds. Shows little recognition of social uses of language or the general development of personality.

483. SMALLIDGE, OLIVE E. "The Elementary Child and the English Program," *Elementary English Review*, XV (January, 1938), 19–22, 39.

Describes the aims and skills to be developed in elementary English, the standards to be achieved, and the need of adjusting grade standards to the individual.

484. SWIFT, G. A. "Creative Expression," *English Journal*, XXVII (January, 1938), 27–32.

Presents an able analysis of what is meant by creativeness in the use of language, with definite suggestions for developing it.

485. THORPE, CLARENCE DEWITT. "The Articulation Project of the Michigan Council of Teachers of English," *Elementary English Review*, XV (January, 1938), 23–26.

Outlines the Michigan plan for promoting continuity of the program in English, leading to adequate preparation for college on the part of bright-normal pupils.

486. TRESSLER, J. C. "Is Grammar Dead?" *English Journal*, XXVII (May, 1938), 396–401.

Makes a plea for the retention of functional grammar taught in use and for use, with suggested techniques for practical application in speaking and writing.

487. WENIGER, CHARLES E. "Better Speech Patterns and the English Course," *Elementary English Review*, XV (January, 1938), 1–4.

Discusses the value of speech patterns in the development of personality, the need of greater consciousness of them, and the importance of training in them.

SPELLING[1]

FREDERICK S. BREED
University of Chicago

488. BREED, FREDERICK S. "Selection and Gradation of the Spelling Vocabulary," *Appraising the Elementary-School Program*, pp. 350–60. Sixteenth Yearbook of the Department of Elementary School Principals. Bulletin of the Department of Elementary School Principals, Vol. XVI, No. 6. Washington: Department of Elementary School Principals of the National Education Association, 1937.

Reports the general results of a study of the writing vocabulary of children based on themes and letters. The study represents a composite of seven recent investigations dealing with word usage in different parts of the United States. The total number of running words tabulated was 1,193,212; the total number of different words, 12,437. Frequency of use and frequency of misspelling were recorded by grades for each word.

489. BREED, FREDERICK S., with the co-operation of FRED C. AYER, T. G. FORAN, and ERNEST HORN. "Special Methods and Psychology of the Elementary-School Subjects: Spelling," *Review of Educational Research*, VII (December, 1937), 519–25, 571–74.

Summary and bibliography of eighty studies in spelling published during the three-year period ending June 30, 1937.

490. BURTON, MARY E. "A Note on Spelling," *English Journal* (College Edition), XXVI (October, 1937), 654–55.

Reports favorable results obtained in Freshman composition by supplying the correction for each misspelled word and keeping a list of the errors of each student.

491. CAPRON, CLARA HUNTER. "Improving Instruction in Spelling: A Review of Recent Studies," *Elementary English Review*, XV (February, 1938), 43–51, 75.

A summary of results and conclusions reported in twenty-eight studies published during 1936 and 1937.

[1] See also Item 510 (Lindahl) in this list.

492. CURTIS, GEORGE H. "What Price Conservatism!" *Journal of the National Education Association*, XXVII (March, 1938), 67.

A brief discussion of the need for spelling reform. Seems to blame teachers for the tardiness of this movement, when social forces outside the school are mainly responsible.

493. DUPEE, C. W. "A Comparative Experimental Study of the Pupil-self-study Method and the Modern-systematic Method of Teaching Spelling," *Journal of Experimental Education*, VI (September, 1937), 1–6.

A type of individual method was compared with a group method. In the first the pupils were tested and retested on one hundred words and were excused as the tests showed mastery. The teacher gave time to analysis of results and to diagnosis of individual cases. In the second method a type of group instruction was employed. Retention of learning was about the same for the two methods.

494. FITZGERALD, JAMES A. "The Vocabulary and Spelling Errors of Third-Grade Children's Life-Letters," *Elementary School Journal*, XXXVIII (March, 1938), 518–27.

Provides a list of 692 words each of which was used ten times or more in 1,256 letters written by third-grade children in life outside the school. The number of misspellings of each word is also provided.

495. GATES, ARTHUR I., and RUSSELL, DAVID H. *Diagnostic and Remedial Spelling Manual—A Handbook for Teachers.* New York: Teachers College, Columbia University, 1937. Pp. iv+44.

A manual designed as an aid to the discovery of the kinds of spelling difficulties encountered and their underlying causes, together with the procedures that can be used for overcoming them. Directions and a test folder are provided for a series of diagnostic tests.

496. GILLETT, NORMA. "Insuring Spelling Correctness in Written Composition," *Elementary English Review*, XV (February, 1938), 55–56.

A list of ten suggestions that may prove helpful in securing correct spelling without interfering unduly with the spontaneity of expression of pupils.

497. HARDER, KEITH C. "The Relative Efficiency of the 'Separate' and 'Together' Methods of Teaching Homonyms," *Journal of Experimental Education*, VI (September, 1937), 7–23.

A study conducted with third- and sixth-grade pupils. In only one comparison was the critical ratio large enough to indicate the certainty of a difference. Judged by their direction and consistency, the differences indicated probable advantage for the "together" method in immediate memory and for the "separate" method in remote memory.

498. JOHNSON, LOAZ W. "A Comparison of the Vocabularies of Anglo-American and Spanish-American High-School Pupils," *Journal of Educational Psychology*, XXIX (February, 1938), 135–44.

Shows the difference in knowledge of vocabulary between Spanish-American and Anglo-American high-school pupils in Grant County, New Mexico, as indicated by the Inglis tests.

499. JONES, JEAN BRADY. "Objective Testing of Pronunciation at the College Level," *Quarterly Journal of Speech*, XXIV (February, 1938), 62–65.

Describes an objective written test for measuring the accuracy of pronunciation of college students. The test is published by E. M. Hale and Company, Eau Claire, Wisconsin.

500. MOORE, JOSEPH E. "A Comparison of Four Types of Spelling Tests for Diagnostic Purposes," *Journal of Experimental Education*, VI (September, 1937), 24–28.

Virtual repetition and confirmation of a previous study of four types of spelling tests. In descending order of difficulty, the four ranked as follows: story form, timed dictation, list form, multiple choice. To employ the principle that tests rank in validity as they rank in difficulty is a questionable procedure, even though, in this instance, it yields a conclusion similar to that reached in other validation studies of the same tests. Obviously the test which "fails" the most pupils is not necessarily the best.

501. RATCLIFFE, MARGARET; MOLLERSTROM, DORIS; and FULLER, ALICE COOK. "Modern Objective Tests," *Grade Teacher*, LV (December, 1937), 66–67.

Presents a specimen double-alternative spelling test in context form.

502. RUSSELL, DAVID HARRIS. *Characteristics of Good and Poor Spellers*. Teachers College Contributions to Education, No. 727. New York: Teachers College, Columbia University, 1937. Pp. 104.

Spelling ability was studied in relation to constitutional factors, academic achievement, and methods of study. The author compared group differences between individually matched normal and retarded spellers and made supplementary analyses of individual cases of disability.

503. STURDYVIN, EVELYN M. "Note on Recognition versus Recall as Methods of Testing Spelling," *Journal of Educational Psychology*, XXVIII (May, 1937), 394–96.

Found a correlation of .88 between scores of three hundred pupils on a column-dictation and a multiple-choice test containing the same words. In previous studies of the same relationship the conclusions have not been so favorable to the recognition test of the type used.

504. WENZEL, BRIGETTA E. "Mastery Tests in Spelling," *Nation's Schools*, XXI (January, 1938), 27–28.

Reports the percentage of pupils obtaining perfect scores on the units of work in Grades II and III.

HANDWRITING

FRANK N. FREEMAN
University of Chicago

505. BIRCH, C. E. "Shall Beginners Start Writing with Print?" *Kansas Teacher*, XLVI (December, 1937), 23.

A critical article emphasizing the requirements of movement, posture, and writing habits.

506. BROADDUS, LOUISE E. "Manuscript vs. Cursive Handwriting," *Virginia Journal of Education*, XXXI (March, 1938), 244–45.

A summary of opinions on manuscript writing, largely adverse.

507. COLE, LUELLA. "Heresy in Handwriting," *Elementary School Journal*, XXXVIII (April, 1938), 606–18.

An attack on the assumed current principles of teaching writing, with proposed substitutes.

508. FREEMAN, FRANK N. "The Place of Handwriting in the Schools of Today," *Educator*, XLIII (March, 1938), 12–13, 24.

A review of current problems in the teaching of handwriting, with emphasis on the development of an individual style.

509. GRIFFITHS, NELLIE L. *Manuscript Writing*. Chicago: Hall & McCreary Co., 1937. Pp. 32.

A review of the evidence on manuscript writing and a brief manual for the early grades.

510. LINDAHL, HANNAH M. "The Effect of Manuscript Writing on Learning To Spell," *Childhood Education*, XIV (February, 1938), 277–78.

An experiment to determine the effect of manuscript writing on spelling in the first grades in Mishawaka, Indiana.

511. MARETZ, SARAH. "Handwriting and Language," *Grade Teacher*, LV (March, 1938), 36.

Description of the correlation between English and handwriting.

512. WHEAT, LEONARD B. "The Fountain Pen Brings Change," *School Executive*, LVII (February, 1938), 278.

Gives practical advice on the use of the fountain pen in school.

THE SOCIAL SCIENCES[1]

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In the compilation of the material for this division of the list of selected references, the assumption has been that the material which

[1] See also Item 377 (Caswell) and Item 385 in the list of selected references appearing in the September, 1938, number of the *Elementary School Journal*.

has appeared during the past year in *Social Studies* and *Social Education* is well enough known to justify omitting it. Furthermore, to have included it would have necessitated omitting much fugitive material the locating of which requires a great deal of time.

513. ATKINSON, RALPH. "The Teacher of Modern Social Studies," *Colorado School Journal*, LIII (January, 1938), 19–20.

A plea for strong emphasis on the historical approach to current aspects of social living in order to guard against the creation of the current-event mind.

514. AYER, FRED C. "The Social Studies in the Changing Curriculum," *Education*, LVIII (March, 1938), 397–405.

Discusses a few of the leading trends and forward-looking points of view in relation to the social sciences during the past few years.

515. BALDWIN, J. W. "How the Social-Studies Workroom Works," *American School Board Journal*, XCVI (April, 1938), 23–24, 91–92.

An illustrated presentation of the laboratory work of pupils in Grades VI, VII, and VIII in connection with the regular work on certain units in history.

516. BALL, C. C. "Social Studies for Citizenship," *Education*, LVIII (March, 1938), 390–96.

A portrayal of the conditions now existing in the world and a few suggestions on the possibility of assuring a more satisfactory world in the future through the proper emphasis on, and presentation of, the social sciences.

517. BEMUS, NORMA LEONE. "Social Studies," *Texas Outlook*, XXII (February, 1938), 36–37.

An exposition of the purposes and the methods in the so-called "social studies," along with an illustration of the procedure followed in teaching a unit of understanding in the low-seventh grade of the John Marshall High School, Houston, Texas.

518. CASSIDY, ROSALIND. "Youth Journeys and the Social Sciences," *Recreation*, XXXII (April, 1938), 3–5, 44–45.

The purpose of this discussion is to demonstrate, by means of concrete example, the value of travel as a laboratory method in citizenship education.

519. DEWEY, JOHN. "What Is Social Study?" *Progressive Education*, XV (May, 1938), 367–69.

A discussion of the interrelations of all studies and a plea for the recognition of the term "social" as the limiting function of all branches of study.

520. DIX, JOHN P. *Vocabulary Booklet in the Social Studies*. Kansas City, Missouri: John P. Dix (% Northeast Junior High School), 1938 (revised). Pp. 120.

A booklet containing a master list of five hundred words frequently met by classes in the social sciences. Besides the list of words and their meanings, the booklet has material on how to use it and a fair sprinkling of learning exercises.

521. EBY, KERMIT. "The History Teacher in an Age of Change," *Clearing House*, XII (March, 1938), 405–8.

"Teaching history in an age of transition demands knowledge, perspective, and vision. But the greatest of these is vision!"

522. ELLWOOD, ROBERT S. *The Unit Assignment and the Social Studies*. Illinois State Normal University Bulletin, Vol. XXXV, No. 145. Normal, Illinois: Illinois State Normal University, 1937. Pp. 30.

A presentation, within the framework of the unit-assignment procedure, of a program for utilizing some of the newer practices of teaching the social sciences.

523. HENDERSON, KATHLEEN J. "Organizing Group Work in the Social Studies," *American Childhood*, XXIII (January, 1938), 23–24.

Describes the plan of organization for group work utilized by a teacher of social-science material in a fifth-grade class of more than forty pupils.

524. HOUSTON, V. M. "Improving the Quality of Classroom Questions and Questioning," *Educational Administration and Supervision*, XXIV (January, 1938), 17–28.

The report of an experiment involving social-studies teachers in two junior high schools of New York City, which shows conclusively that questioning can be improved.

525. HUNT, ERLING M. "We Need Better Social Studies Teachers," *Teachers College Record*, XXXIX (March, 1938), 459–66.

A consideration of how social-science teachers can be helped to discharge their responsibilities more effectively in terms of growth in service, limitations in the selection of teachers, qualities of mind and personality, and knowledge and scholarship.

526. KELTY, MARY G. *The Teacher Surveys Her Social-Studies Problem*. Boston: Ginn & Co., 1938. Pp. 14.

A brief treatment of aspects of the social sciences in elementary and junior high schools, such as the general nature of the course of study, the range of abilities within each grade, and classroom procedures.

527. KREY, A. C. *A Regional Program for the Social Studies*. New York: Macmillan Co., 1938. Pp. xiv+140.

A general presentation of a proposed program in the social sciences for an agricultural region concerned chiefly with dairying and the cultivation of small grains.

528. PANDY, JOSE A. "Vitalizing the Teaching of Social Science," *Philippine Journal of Education*, XX (November, 1937), 444–47.

Discusses the value and the use of batteries of tests in the teaching of a unit of understanding according to Morrison's fivefold set-up. Sample tests are included.

529. ROBEY, HOWARD W. "Some Inexpensive 'Interest-Builders' for Social Studies Teaching," *Kentucky School Journal*, XVI (January, 1938), 40–41.

Experiences from actual classroom situations involving the building of a vitalized program in the social sciences in Grades VIII and IX.

530. SILLIMAN, GEORGINA. "Trends and Practices for Intermediate Social Studies Curriculum," *New Mexico School Review*, XVII (May, 1938), 4–5.

A brief consideration of four marked trends in social-science materials and methods in the intermediate grades.

531. TRYON, R. M. "The Development and Appraisal of Workbooks in the Social Sciences," *School Review*, XLVI (January, 1938), 17–31.

A critical evaluation of the workbook movement in the social sciences from the viewpoint of its antecedents, practical workings, and probable future.

532. ZECHIEL, A. NORRIS, and MCCUTCHEN, S. P. "Reflective Thinking in Social Studies and in Science," *Progressive Education*, XV (April, 1938), 284–90.

An exposition of the present-day need for emphasis on reflective thinking in the teaching of the social sciences and a few suggestions relative to procedure.

GEOGRAPHY

EDITH P. PARKER
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The following list was derived from a canvass of material published since August 1, 1937. It includes those publications which seem to be the more helpful, significant contributions.

533. AITKEN, W. E. M. "Geography for Grades V–VIII," *School* (Elementary Edition), XXVI (September and October, 1937), 31–35, 122–27; "Geography for Grades VII and VIII," ———, XXVI (November, 1937–June, 1938), 223–25, 318–19, 413–15, 506–9, 598–600, 689–91, 782–84, 870–72.

Gives specific directions for geography work in Grades V–VIII.

534. BIRCH, T. W. "Interest-stimulating Devices," *Journal of Geography*, XXXVI (October, 1937), 285–87.

Describes interesting graphic and map devices for correlating given types of facts.

535. CREWSON, WALTER S. "Suggestions for Teaching a Phase of the Banana Industry of Central America," *Journal of Geography*, XXXVII (April, 1938), 164–67.

Tells of the use of field work and visual material in introducing a geographic problem.

536. CURTIS, DWIGHT K. "Geology as a Basis for Elementary School Geography," *Journal of Geography*, XXXVII (April, 1938), 143–48.

States results of a study of the ability of fifth-grade children to use geological understandings in interpreting environmental adjustments.

537. DUDLEY, ELIZABETH. "An Approach to Map Study," *Journal of Geography*, XXXVI (December, 1937), 354–56.

Describes the experiences of third-grade children in making a map of their community.

538. *Educational Method*, XVII (March, 1938), 257–320.

The whole issue is devoted to geography. The articles of special interest to elementary-school teachers include the following: "Geography: A Promoter of Better Living," by Cora Sletten; "Some Trends in the New Geography Education" and "A Supervisory Procedure in Geographic Education," by Erna Grassmuck Gilland; "The Technique of Error Diagnosis in Geographic Instruction," by Edith P. Parker; "Diagnosing Study Difficulties in Elementary Geography," by F. E. Lord; "The Place of Geography in American Culture," by Pearl H. Middlebrook; "Aerial Views—Aids to Geographic Study," by Edna E. Eisen; "An Evaluation of Some Visual Aids to the Teaching of Geography," by Henry F. Becker; "Maps: The Sign Language of Geography," by Alison E. Aitchison and Marguerite Uttley; "Field Work in Geography," by L. C. Davis; "Aids from the Research Field," by Norah E. Zink.

539. EVANS, J. "Geography in a Senior Boys' School," *Geography*, XXIII (March, 1938), 29–34.

Stresses the value of geographic work in developing a clear understanding of the life, work, and problems of various peoples.

540. GOEBEL, ANNE M. "The Florida Fruit and Vegetable Region," *School Science and Mathematics*, XXXVII (June, 1937), 658–64; "A Sixth Grade Unit on Peru," ———, XXXVII (December, 1937), 1066–78.

These articles include some subject matter and discuss methods of using it.

541. GREGORY, W. M. "Radio Guidance for Geography Instruction in the Cleveland Elementary Schools," *Educational Method*, XVII (November, 1937), 65–69.

Points out the value of radio lessons in aiding teachers in their use of pictures, maps, and slides.

542 HAZLETT, J. ROY. "An Experimental Study of Methodology in Geographic Material by Motion Pictures," *Pittsburgh Schools*, XII (January–February, 1938), 128–38.

Describes an experiment with motion pictures and accompanying lectures by the teacher.

543. HERDMAN, T. "A Preliminary Investigation of Children's Comprehension of Geographical Ideas," *Geography*, XXII (June, 1937), 130–33.

Reports the results of an investigation of the ability of pupils to interpret a simple relief map.

544. HILE, MARTHA JANE. "The Use of Photographic Material in the Teaching of Geography," *Journal of Geography*, XXXVII (February, 1938), 55–63.

Discusses the selection and the use of slides at various grade levels.

545. JESSOP, GRACE F. "A Map for Diagnostic Purposes," *Journal of Geography*, XXXVII (March, 1938), 112–15.

Presents a map test devised to discover the map-reading abilities of seventh-grade pupils.

546. KESSELMAN, WILLIAM. "An Effective Problem Method," *Journal of Geography*, XXXVI (December, 1937), 369–73; "New England States' Problems," ———, XXXVII (May, 1938), 196–201.

Two articles describing methods of presenting and solving geographic problems.

547. LEVI, HERMAN S. "Ineffective Geography Teaching—Why," *Journal of Geography*, XXXVII (May, 1938), 185–88.

Reports findings from a questionnaire survey of all junior high schools in New York City.

548. RAMSDELL, LOUIE G. *A Course of Study in Geography for the Elementary School Grades*. Bulletin of the Massachusetts Department of Education No. 6, 1937. Boston: Division of Elementary and Secondary Education and State Teachers Colleges, State Department of Education, 1937. Pp. 66.

Offers bibliographies and teaching suggestions in the form of a manual.

549. REPASS, FRANCES C. "An Experiment in Teaching Current Geography," *Journal of Geography*, XXXVI (November, 1937), 321–24.

Reports increased map-reading ability and understanding of world-problems gained through the study of current events.

550. RIGGS, MARGARET. "Geography Field Work in the Small City," *Journal of Geography*, XXXVII (January, 1938), 28–31.

Shows how geography field work at the upper-grade level may be effectively carried out in the small city.

551. RILEY, NOMA. "A Picture Library and Its Use," *Journal of Geography*, XXXVII (May, 1938), 202–5.

Suggests an interesting scheme for making large collections of pictures available for testing purposes.

552. ROTHWELL, ETHEL C. "How the Curriculum Grows: The Study of Cocoa, An Example," *Journal of Geography*, XXXVII (January, 1938), 15–19;

"How a Study of Cocoa Led to a Study of Other Foods," ———, XXXVII (March, 1938), 91–98; "Many Different Activities Grew Out of a Study of Foods," ———, XXXVII (April, 1938), 149–55.
Describes the work of a fourth-grade class.

553. SCHAUER, VIRGINIA P. "A Study Guide for the Textile Districts of the British Isles," *Journal of Geography*, XXXVII (April, 1938), 156–63.
Makes suggestions for sixth-grade pupils.

554. SELKE, ARTHUR C. "The Riddle as a Geographic Teaching Device," *Journal of Geography*, XXXVI (October, 1937), 283–84.
Illustrates the use of the riddle in geography classes at various age levels.

555. SMITH, VILLA B. "Lantern Slide Technique in Geography Instruction," *Educational Screen*, XVI (October, 1937), 247–49.
Describes the effective use of lantern slides in the classroom.

Educational Writings

*

REVIEWS AND BOOK NOTES

DEMOCRACY AND EDUCATION IN CZECHOSLOVAKIA.—Because of their value in molding public opinion, schools are usually harmonized with the dominant social ideology. Accordingly, modern political changes from republics to dictatorships have been accompanied by changes in school systems. Such changes lend interest to a country like Czechoslovakia, which has, thus far, remained a republic in the midst of dictatorships, and makes timely and suggestive a review of its schools.[1]

Experience with Hapsburg indoctrination and its boomerang on its promulgators led post-war Czech educators to place emphasis on teaching children to think and to weigh evidence, as the best educational program for a self-governing democracy. The study under review, based largely on observations made in 1934–35, aims to show the progress achieved in changing from the Hapsburg system to that urged by Czech educators and to show the possibilities of progressive experimentation within a centralized school system.

Part I, "Progressive Schools," to which is given 125 pages, reviews early private attempts at progressivism, most of which failed, and gives extended consideration to the general backgrounds and present status of state experimental schools at primary, junior high school, and secondary levels. The second part, "Standard Schools," occupying forty-six pages, devotes a chapter each to primary schools, junior high schools, secondary schools, and universities. This discussion shows how the innovations tested in the experimental schools are by decree put into the schools of the whole republic. It also indicates that the higher the level, the less the change. Part III, "Educational Progress," in sixty-two pages evaluates the changes in the educational system through a characterization of the existing variety of vocational and continuation schools, including provisions for adult education, athletic associations, and social-welfare foundations; through a short discussion of the training, appointment, salaries, and pensioning of teachers; through brief comment on the evolving educational theory of the republic; and through a review of the democratic influence of the new curriculums. A brief summary recapitulates the high points of the study. There are a short glossary, a bibliography, and an index.

The historic absence within present Czechoslovakia of the segregated and

[1] Francis H. Stuerm, *Training in Democracy: The New Schools of Czechoslovakia.* Published under the Auspices of the Progressive Education Association. New York: Inor Publishing Co., 1938. Pp. xiv+256. $2.50.

aristocratic *Vorschule* as a preliminary to secondary schooling; the rapid growth of the junior high school (Grades VI–IX) and, for Europe, rather easy transfer to secondary schools leading to universities; the eight different languages in which state schools are conducted; and the activities of pupil government at levels beyond Grade V are among numerous items which will appeal to Americans interested in democratic education. Other features of the Czechoslovakian system which will interest Americans are the frequent occurrence of progressive schools in the provinces nearest Germany, the extensive separation of the sexes in the schools, the small number of pupils in the secondary schools proper, and the conservatism and orthodoxy at the higher educational levels.

Although the period between the World War and 1930 was largely spent on theoretical disputes, practical reform got under way, through American and other influences, in the early 1930's. Much remains to be done, particularly in eastern and rural areas, but progress is being made. Acquaintance with conditions preceding reform, the progress of reform itself, and the future outlook should be fruitful for Americans interested in democratic educational practice.

HAROLD H. PUNKE

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THE MOTION PICTURE: SEDATIVE OR STIMULANT?—The reader who believes that the primary function of the motion picture is to give insight and illumination on human affairs is going to be disappointed with Kiesling's book.[1] For he will find a concept of the movie as an escape device, as a mental sofa on which to recline, as an anodyne after a day of hard work. Quoting the author directly, "They [the movies] afford an escape from a possibly drab or monotonous environment" (p. 35). Further, the appreciation of motion pictures is linked largely to the mechanics of production. Kiesling constantly reiterates that "a photoplay is a mosaic of many different arts and vocations, to be exact, 276" (p. 4).

The plan of the book is simple. The following chapter headings are included: "Motion Picture Appreciation," "History of Motion Pictures," "A Single-minded Community," "Dreams Wanted," "The Story Is Selected," "Why Stories Are Changed," "The Scenario Writer," "Motion Picture Research," "The Sets Are Made," "Properties," "Costuming the Picture," "Strange Jobs," "The Casting Director," "Stars," "Making Folks Over," "The Director," "The Stage Is Set," "Lights! Camera!" "Going on Location," "Sound Recording," "Music in Pictures," "Editing the Film," "Developing the Film," "Social Influences," "The Short Subject," "In Home and School," "The Film Abroad," and "The Road Ahead."

Reading these chapters, one notes quickly that the author's position as associate director of publicity of Metro-Goldwyn-Mayer has largely unfitted him for writing a treatise on more fundamental aspects of motion-picture apprecia-

[1] Barrett C. Kiesling, *Talking Pictures: How They Are Made, How To Appreciate Them.* Richmond, Virginia: Johnson Publishing Co., 1937. Pp. xii+332. $1.40.

tion. Each chapter consists largely of a series of anecdotes strung together, many of which, one fears, have previously appeared somewhere as publicity releases from the Metro-Goldwyn-Mayer offices. For example, we learn of the young man who got his position in Hollywood because "from the age of fourteen, he had been an expert on guns of all nations and times. He was given a job immediately" (p. 26). We are sternly warned, "Don't come to Hollywood unless you have real ability in acting. . . . . Don't come to Hollywood unless you have enough money for a year's stay" (p. 28).

To anyone who has even a bowing acquaintance with Hollywood finance—for example, the absurdly high salaries, especially of officials—the following statement in itself must be considered as wholly insincere: "Today, although the screen is less than fifty years old, it has practically completed the process of purging itself of those insincere persons who saw in it only a quick way to easily gained money" (p. 77).

"Why Stories Are Changed" is an excellent chapter and discloses that Kiesling might have written a much better volume had he not done this job in such an evidently hurried manner. As a consequence of the hurry there are too many gaps in Kiesling's treatment. For example, I would consider it exceedingly significant in a fundamental appreciation of the screen to know why such a story as Sinclair Lewis' *It Can't Happen Here* was not produced by the company which purchased the screen rights. I would like to know more about the role of the motion picture as a propaganda device, for example, about the co-operation of the navy with Warner Brothers in producing "Wings over the Navy." Yet nowhere are such vital questions discussed.

Instead, the author reports the tremendous detail of research necessary to answer accurately such questions as, "Did the first French colonial governor of New Orleans wear a mustache?" or, "In what year did ice cream make its first appearance " Such research activities appear ludicrous when we realize how inaccurately negroes, Chinese, newspaper men, college professors, and others are depicted on the screen.

The author also suggests the influence of the movies on the style of hairdress, on clothing, and on furniture. He says little, however, about the influence of motion pictures on more significant things—on the motivation of people, on the stereotypes developed and reinforced by the viewing of Hollywood films. Nor does he say anything about the factors which are today producing an extremely large number of poor films—such factors as the methods of sale and distribution, which are virtually monopolistic and which result in a condition described as follows by the noted director, Frank Capra:

> Three-fourths of the pictures made today are made because the studios have release dates to meet, and not because anyone has anything that must or should be expressed by them. They are sold a year in advance, and now must be delivered like so much merchandise. . . . .
>
> It's no trick to sell a good picture. People break down doors to see one. But fully

one-third of the current pictures would not see the light of day if they had to be sold on the open market ["A Sick Dog Tells Where It Hurts," *Esquire*, V (January, 1936), 87, 130].

The author uses attendance statistics with the same inaccuracy as does the Hays office. He says, for example, that "Gone with the Wind" will have an audience of one hundred million persons in its first weeks in film form. This statement is of a piece with the erroneous statistics issuing from the motion-picture industry showing a weekly audience in the United States of a hundred and fifteen millions in 1929 and eighty millions in 1937. Indeed, there is no likelihood that "Gone with the Wind," even if highly popular, would have an audience of one hundred millions by the end of its run.

We do, indeed, need to learn how to appreciate the motion picture and how we can use the screen in America to tell the American people that they are using up their natural resources, as Pare Lorentz has strikingly done in the film "The River"; that America needs to rethink her housing problem, as suggested in "Dead End" and "Boy of the Streets"; that Fascist threats to democracy must be courageously faced, as shown in the March of Time release "Inside Nazi Germany." These are items of appreciation which Mr. Kiesling has neglected. He has told us how to kill time, but he has not told us how the motion picture can be used to fill time in ways which are not only socially useful but recreative as well.

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THE SCHOOL IN ITS COMMUNITY ASPECT.—Good basic books in the field of educational sociology are scarce. Such works are usually defective because they are written either by educators who are too little familiar with the science of sociology or by sociologists who have only a superficial knowledge of education and its problems. A common fault of such volumes, moreover, is that they are too broad and general in their statements, that they smack of the armchair rather than of the objective approach of modern science. These criticisms cannot be made of Cook's *Community Backgrounds of Education*.[1] This book indicates on the part of the author a thorough grasp of educational processes and problems considered from a genuinely sociological point of view. It is replete with concrete material and avoids undue philosophizing. It represents a contribution to the important field of school and community relations.

In his introductory chapter the author points out the significance of social change for education, especially the increasing complexity in community life which makes it impossible for the traditional type of education to function effectively. He conceives of education as social guidance, which, if the school's guidance of the child is to be effective, must necessarily extend into the com-

[1] Lloyd Allen Cook, *Community Backgrounds of Education: A Textbook in Educational Sociology*. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xii+398. $3.00.

munity. He then points out that the community approach to educational problems has two outstanding values: the first lies in the fact that the local social world contains, in some form or other, all the factors and processes found in the larger society; the second in the fact that the community has concrete reality which can easily be made the subject of learning and teaching. "In short, the community is the school's effective environment, and as such all aspects of its life are of interest to prospective teachers" (p. 14).

The volume is divided into three parts. The first presents a sociological overview of American community life, describes three concrete communities, generalizes for each type, and concludes with a chapter on social planning for community life. In the second part the author presents a study of the school child as a community product. Within the limits set by research materials, this part discusses the nature of a number of child-shaping influences, their effects on personality, and their implications for school progress. The relationships of the teacher and the school in the community are discussed in the third part. A concluding chapter summarizes a recent nation-wide survey of teacher attitudes and information and suggests needed changes in the training of teachers.

As has already been indicated, the contribution of this book lies in the fact that it represents an objective rather than a philosophical approach. It is a presentation of school and community relations made by a student of the subject who is thoroughly at home in the fields both of education and of sociology. From the standpoint of the student, the book is valuable because it presents clearly and in a well-organized fashion the basic factors and problems in the field which it discusses and because it includes the results of research and much concrete case material which add greatly to the understanding of the reader. Although it deals primarily with a specialized aspect of educational sociology, it undoubtedly will make a good beginning textbook in this field because it is objective and clear and stimulating to the student. It offers a point of departure for the discussion of many important sociological problems of education.

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THE SPELLING PROCESS AND SPELLING DISABILITY.—After nearly a half-century of scientific attention to the spelling process and to the causes of poor spelling, educators still do not know how certain basal factors operate in causing a child to misspell. David Harris Russell[1] has considered these problems and has investigated the relations of the process of learning to spell, the kinds of responses, and certain factors associated with incorrect responses.

The study compares group differences between pairs of normal and retarded spellers (matched with respect to school, sex, grade, chronological age, intelli-

[1] David Harris Russell, *Characteristics of Good and Poor Spellers: A Diagnostic Study*. Teachers College Contributions to Education, No. 727. New York: Teachers College, Columbia University, 1937. Pp. 104. $1.60.

gence quotient, and number of terms in school) and presents analyses of individual cases of disability. Sixty-nine pairs of normally intelligent pupils from Grades III, IV, and V of the New York City schools participated.

In general, the study has been conducted with nice regard for the principles of scientific investigation. One of each pair of subjects was normal or better in spelling, and the other was a year or more retarded, the mean difference being slightly over two years. Subjects were studied carefully in the light of tests of intelligence, vision, audition, kinesthesis, and academic achievement. The methods of study used by the pupils were also carefully investigated although a question arises regarding the technique for exploring methods of study. The children were asked to study as they usually did but to say aloud what they were thinking while the observer kept time and checked against a list of fifteen items, such as saying the word, spelling orally letter by letter, and fixing on the hard part. It appears probable that the attempt to think aloud may distort the normal method of attack; certainly there is no guaranty to the contrary.

The author is to be congratulated on his lucid presentation. The findings agree with those of previous investigations, namely, that no single disability but a combination of disabilities tends to be connected with poor spelling. The report considers two or three dozen factors associated with spelling difficulty. Slight constitutional defects do not often cause spelling difficulty, but occasionally major defects in vision, hearing, or speech appear to be causative factors. To a greater extent difficulties in academic achievement are associated with poor spelling. Normal and retarded spellers appear to differ with respect to techniques of study.

In view of previous investigations in this field, the chief contribution of this study would appear to lie in the allocation of factors associated with poor spelling to positions of relative importance and in the emphasis on the recommendation that elementary-school programs should stress the early development of proper techniques for word attack rather than the acquisition of a set spelling vocabulary. From now on, major attention in this field should be focused on the problems of why causative factors operate to bring about spelling difficulties and how these difficulties may be prevented or corrected.

To school officials Russell's book should prove valuable for its diagnostic program for poor spellers. Educational psychologists will appreciate the well-executed research and the implications for further investigation.

LUTHER C. GILBERT

University of California

CORE COURSES IN THE SOCIAL STUDIES FOR THE ELEMENTARY GRADES.—Of late years much interest has been shown in the development of core courses in the social studies. Excellent work has been done in planning sequences for the elementary-school and the junior high school levels. Such contributions are

most useful when they grow out of the actual classroom practices of teachers who have learned to think in terms of the twelve-year sequence and even beyond the twelfth year and to consider the problem in its entirety rather than in terms of overlapping and poorly integrated cycles.

The authors of the books under review[1] have planned in terms of the growth of the child through his whole school experience. Writing for the four years of the elementary school, they have developed a social-studies core for those years. At the same time, they have been realistic in their efforts to equip the child with a rich store of ideas and concepts which should be basic to the work in the junior and senior high schools.

These are not textbooks in history, geography, and civics as the terms are generally used, but the authors appear to have made good their promise to introduce the pupil to his broad social heritage. In the first book the child studies ways of living that are different from the ways of living in our country. Stories of Indian, Bedouin, Lapp, Chinese, Swiss, and Mexican children supply the materials; the emphasis is social; and the approach is that of the student of human geography. The second book uses a modified conversational-historical approach and deals with the origins of our own ways of living. Again the emphasis is social, and there is a rich setting of human geography with enough place geography to serve as an introduction to the use of maps. The emphasis in the third book is largely economic and social, while the fourth book contains four units that are social, one which might be described as economic, and one unit in government as a social process. The tone of the whole series would appear to be predominantly social, with a well-planned appeal to the developing interests of the child.

The materials are admirably graded as to vocabulary, grammar, style of presentation, suggested learning activities, and content. Each book consists of six units of learning, the unit being described as "a body of subject matter, plus an implementing group of learning activities, every detail of which is focused on a central cluster of ideas" (p. vii). The real objectives of learning are described by the authors as "ideas, social insights, and skills" rather than "raw information" (p. vi).

Each of the four books is an integral part of the series, yet each has merits of its own. To cite one example, the fourth, *Richer Ways of Living*, has a special appeal because of the strong motivating value it should have in teaching social friendliness, aesthetic appreciation, health and conservation attitudes, the scientific spirit, and an interest in government as it affects our ways of living.

BURR W. PHILLIPS

University of Wisconsin

[1] Howard E. Wilson, Florence H. Wilson, and Bessie P. Erb, Our Ways of Living: *Living in Many Lands*, pp. x+306; *Where Our Ways of Living Come From*, pp. xii+474; *Living in the Age of Machines*, pp. xii+586; *Richer Ways of Living*, pp. xii+666. Chicago: American Book Co., 1937.

A HUMAN-INTEREST STORY OF AMERICAN HISTORY.—A welcome addition to the long list of textbooks on the history of our country for the junior high school level has been published by Laidlaw Brothers.[1] It is one of a series of social-studies textbooks based on history, which is subtitled "Our Developing Civilization."

The book is divided into units, with a preview or introduction to each unit and, similarly, a review or summary at the end of each unit. The introductions are especially well written. The authors claim that they have gone to great pains to verify their statements of facts, in an attempt to make their story historically accurate. In this aim they have succeeded better than the authors of most other textbooks in this field at this level of instruction. That is, the results of recent research in the field have been used as a check on the content and the historical accuracy of the volume.

Certain aids to teaching and learning are outstanding. Maps, for instance, are referred to specifically in the context, by page citations. The pictures are in attractive colors. The sections dealing with immigration and Americanization are informative and stimulating for this level of instruction.

A weakness for many pupils and teachers, however, will be found in the sections on transportation and communication, which duplicate much of the content offered in many sixth- and seventh-grade courses in geography, especially in school systems where new curriculum trends are prominent. Occasionally there are inconsistencies in names and titles; for example, the present Secretary of Labor is referred to as "Miss Frances Perkins," without the explanation that this is her political and public name, not her married name nor the "Ma Perkins" by which she is often called. Again, in the references to numbers of individuals, events, etc., "hundreds," "scores," or other like designations are sometimes given when "thousands" or "millions" would have been more nearly accurate. These irregularities, however, are minor matters and detract very little indeed from the value and the timeliness of the book.

The chief contribution of this textbook will doubtless be its appeal, to teacher and pupil alike, as a real, living, human story of our country's development, with maps, pictures, illustrations, and other aids that are really challenging to the youths who are to use the book.

R. E. SWINDLER

University of Virginia

MORE TRAVEL READERS.—Two books of supplementary reading[2] designed for children of elementary-school grades should constitute a welcome addition

[1] C. H. McClure and W. H. Yarbrough, *The United States of America*. Chicago: Laidlaw Bros., 1937. Pp. 672. $1.68.

[2] Ruth Strang, Barbara Stoddard Burks, and Helen Searcy Puls, Fact and Story Series: *Seven Days at Sea*, pp. viii+118; *Here and There and Home*, pp. vi+120. New York: Teachers College, Columbia University, 1938. $1.00 each.

to the classroom bookshelf. The books recount the adventures of Donald and Frances on a sea voyage and on a trip through Scotland and England, the latter adventure being called, curiously enough, *Here and There and Home.* The confessed purpose of the authors is to provide easy and interesting reading materials. To that end a simple vocabulary is used, with preference for the first thousand words of the Thorndike list. While this precaution guarantees simplicity, the appeal to interest is probably no greater than that in numerous narratives already available for children's reading. However, as the library of children's books is usually none too well supplied with appropriate and properly graded reading material, the enlargement of the collection by authors who sense the reading needs of children constitutes a worthy undertaking.

Tests are appended in each volume. "You can test yourself," say the authors in addressing the pupils, "to make sure you have understood what you have been reading" (p. viii). As is usual in reading tests, the items are exclusively informational and require merely the remembering of facts in the story. Such tests can hardly be called tests of "understanding," although the retention of information is undoubtedly one of the component factors in reading. Reading, properly conceived, is an active mental process, including recognition of relationships as well as an assimilation of factual details.

The one serious question that may be raised with regard to the preparation of original reading material for children has to do with the quality of the reading. One feels that the spontaneity of style occasionally suffers under a restraint which may be due to the pedagogical considerations to be satisfied. Even though a possible lack of literary quality might be admitted, teachers will find these new "travel readers" useful in providing "easing reading" for supplementary practice.

ROY IVAN JOHNSON

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

An Analytical Bibliography of Modern Language Teaching, Vol. II, 1932–1937. Compiled and edited for the Committee on Modern Languages by Algernon Coleman with the assistance of Clara Breslove King. Chicago: University of Chicago Press, 1938. Pp. xviii+562. $4.50.

BLUEMEL, C. S. *The Troubled Mind: A Study of Nervous and Mental Illnesses.* Baltimore: Williams & Wilkins Co., 1938. Pp. x+520. $3.50.

DONOVAN, FRANCES R. *The Schoolma'am.* New York: Frederick A. Stokes Co., 1938. Pp. xii+356. $2.50.

FAWCETT, HAROLD P. *The Nature of Proof: A Description and Evaluation of Certain Procedures Used in a Senior High School To Develop an Understanding of the Nature of Proof.* The Thirteenth Yearbook of the National Council of Teachers of Mathematics. New York: Teachers College, Columbia University, 1938. Pp. xii+146. $1.75.

HOLLIS, ERNEST VICTOR. *Philanthropic Foundations and Higher Education.* New York: Columbia University Press, 1938. Pp. x+366. $3.50.

HORRALL, ALBION H., CODONE, LYDIA E., WILLSON, MABEL S., and RHODES, LEAH SMITH. *Let's Go to School: Integrative Experiences in a Public Elementary School.* New York: McGraw-Hill Book Co., Inc., 1938. Pp. xii+434. $3.00.

JOHNSON, JOHN THEODORE. *The Relative Merits of Three Methods of Subtraction: An Experimental Comparison of the Decomposition Method of Subtraction with the Equal Additions Method and the Austrian Method.* Teachers College Contributions to Education, No. 738. New York: Teachers College, Columbia University, 1938. Pp. 76. $1.60.

LOGASA, HANNAH. *The Study Hall: In Junior and Senior High Schools.* New York: Macmillan Co., 1938. Pp. xiv+190. $2.00.

MCFARLAND, MARGARET B. *Relationships between Young Sisters as Revealed in Their Overt Responses.* Child Development Monographs, No. 23. New York: Teachers College, Columbia University, 1938. Pp. xii+230. $3.50.

MENEFEE, LOUISE ARNOLD, and CHAMBERS, M. M. *American Youth: An Annotated Bibliography.* Prepared for the American Youth Commission. Washington: American Council on Education, 1938. Pp. xii+492. $3.00.

MOSSMAN, LOIS COFFEY. *The Activity Concept: An Interpretation.* New York: Macmillan Co., 1938. Pp. xviii+198. $1.50.

MYERS, ALONZO F., KIFER, LOUISE M., MERRY, RUTH C., and FOLEY, FRANCES. *Co-operative Supervision in the Public Schools.* New York: Prentice-Hall, Inc., 1938. Pp. xviii+340. $2.50.

SCHULTZ, JOSEPH LEMART. *An Analysis of Present Practices in City Attendance Work.* Philadelphia: University of Pennsylvania, 1938. Pp. xii+188. $1.50.

Science in General Education: Suggestions for Science Teachers in Secondary Schools and in the Lower Division of Colleges. Report of the Committee on the Function of Science in General Education, Commission on Secondary School Curriculum. Progressive Education Association Publications. New York: D. Appleton-Century Co., Inc., 1938. Pp. xiv+592. $3.00.

SPIESEKE, ALICE WINIFRED. *The First Textbooks in American History and Their Compiler, John M'Culloch.* Teachers College Contributions to Education, No. 744. New York: Teachers College, Columbia University, 1938. Pp. vi+136. $1.60.

The Stanford Student Leadership Seminar. *Campus Activities.* Edited by Harold C. Hand. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xvi+358. $3.00.

STINCHFIELD, SARA M., and YOUNG, EDNA HILL. *Children with Delayed or Defective Speech: Motor-kinesthetic Factors in Their Training.* Stanford University, California: Stanford University Press, 1938. Pp. xvi+174. $3.00.

STRANG, RUTH. *An Introduction to Child Study.* New York: Macmillan Co., 1938 (revised). Pp. xvi+682. $3.00.

VAN HORN, C. E. *A Preface to Mathematics.* Boston: Chapman & Grimes, Inc., 1938. Pp. xii+124.

WOFFORD, KATE V. *Modern Education in the Small Rural School.* New York: Macmillan Co., 1938. Pp. xiv+582. $2.75.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

BEAUCHAMP, WILBUR L., MAYFIELD, JOHN C., and WEST, JOE YOUNG. Basic Studies in Science, Book I: *Science Problems for the Junior High School.* Chicago: Scott, Foresman & Co., 1938. Pp. xii+432. $1.28.

BUCKLEY, HORACE MANN; WHITE, MARGARET L.; ADAMS, ALICE B.; and SILVERNALE, LESLIE R. The Road to Safety: Book A, *Away We Go,* pp. 56, $0.15; Book B, *Happy Times,* pp. 138, $0.42; Book C, *In Storm and Sunshine,* pp. 152, $0.48; Book D, *In Town and Country,* pp. 216, $0.54; Book E, *Here and There,* pp. 286, $0.54; Book F, *Around the Year,* pp. 346, $0.57; Book G, *On Land and Water,* pp. vi+358, $0.60; Book H, *Who Travels There,* pp. viii+440, $0.66. Chicago: American Book Co., 1938.

GOLDIN, MYRON R., and LICHTMAN, JOSEPH. *My English Lessons.* New York: Globe Book Co., 1938. Pp. viii+164+4. $0.96.

HARDY, MARJORIE. *Teachers' Manual for the Hardy Readers (Second Reader and Third Reader).* The Child's Own Way Series. Chicago: Wheeler Publishing Co., 1938 (revised). Pp. xvi+266. $0.50.

HOLLOWAY, ELMA. *Unsung Heroes.* New York: Macmillan Co., 1938. Pp. xii+332. $1.20.

HUBER, MIRIAM BLANTON; SALISBURY, FRANK SEELY; and O'DONNELL, MABEL. The Wonder-Story Books. Reading Foundation Series. *I Know a Story,* pp. 160, $0.88; *It Happened One Day,* pp. 200, $0.92; *After the Sun Sets,* pp. 304. $0.96. Evanston, Illinois: Row, Peterson & Co., 1938.

LIPPMAN, JACOB, and GOLDIN, MYRON R. *Easy Speller:* Fourth Year, First Half. New York: Globe Book Co., 1938. Pp. viii+56. $0.40.

MARTIN, MAUDE COTTINGHAM, and COOPER, CLYDE EDWARDS. *The United States at Work,* pp. xiv+654, $1.96; *Teacher's Manual for "The United States at Work,"* pp. ii+38, $0.16. Boston: D. C. Heath & Co., 1938.

Reading for Background: No. 6, *Communication through the Ages,* compiled by Edith M. Stoddard and edited by Helen S. Carpenter, pp. 30; No. 8, *Mathematics—Queen of the Sciences,* edited by Frieda M. Heller, pp. 16; No. 9, *The World War—the Great Crusade* by Frances Fitzgerald, pp. 18; No. 10,

Poetry for High Schools, compiled by Amelia H. Munson, pp. 62. New York: H. W. Wilson Co., 1938. $0.35 each.

"Remedial Reading in Junior High School." A Study Project Report by the Teaching Staff of the Roosevelt Junior High School. Aberdeen, South Dakota: Aberdeen Public School, 1937–38. Pp. vi+138 (mimeographed). $2.00.

RUCH, G. M., KNIGHT, F. B., and HAWKINS, G. E. *Living Mathematics*. Chicago: Scott, Foresman & Co., 1938. Pp. 576. $1.28.

RUSSELL, DAVID H., KARP, ETTA E., and KELLY, EDWARD I. *Reading Aids through the Grades: Two Hundred and Twenty-five Remedial Reading Activities*. New York: Teachers College, Columbia University, 1938. Pp. vi+90. $0.75.

SANBLOM, LOLA. *Every Child and Poetry Rhythm*. Los Angeles, California: Lola Sanblom, Southern California School Book Depository (3636 Beverly Boulevard), 1938. Pp. 32. $0.75.

SMITH, NILA BANTON; BAYNE, STEPHEN F.; HOPKINS, JOHANNA M.; and STEEL, MARY E. The Unit-Activity Reading Series: *The World around Us*. New York: Silver Burdett Co., 1938. Pp. 240. $0.80.

STRATTON, CLARENCE. *When Washington Danced: A Tale of the American Revolution*. Adapted by Gertrude Moderow. Chicago: Scott, Foresman & Co., 1938. Pp. vi+336. $1.00.

Teachers' Lesson Unit Series. No. 41 (revised), *Song Source Material for the Activity Curriculum* by Frances Wright and Laverna L. Lossing. New York: Teachers College, Columbia University, 1938. Pp. x+54. $0.75.

The Unit-Activity Reading Series. "Round About You": Unit 1, Supplementary Pamphlet No. 2–1–1, *A Big Airport;* Supplementary Pamphlet No. 2–1–2, *Gliders and Airplanes;* Supplementary Pamphlet No. 2–1–3, *Balloons and Airships;* Supplementary Pamphlet No. 2–1–4, *Lindbergh's Flight*, by Nila B. Smith and Rhoda C. Schwieg. Unit 3, Supplementary Pamphlet No. 2–3–1, *In a Department Store* by Nila B. Smith and Edna Morgan. Unit 5, Supplementary Pamphlet No. 2–5–2, *Rubber and Rayon* by Nila B. Smith and Mildred A. Dawson. Unit 6, Supplementary Pamphlet No. 2–6–1, *Hop, Hop, Hop!* Supplementary Pamphlet No. 2–6–2, *Come and See!* by Nila B. Smith and Eleanor Troxell. New York: Silver Burdett Co., 1938. Pp. 16 each. $0.12 each.

PUBLICATIONS IN PAMPHLET FORM

Adult Education: A Part of a Total Educational Program: A Description of the Educational and Training Program of the Tennessee Valley Authority. Edited by Maurice F. Seay. Bulletin of the Bureau of School Service, Vol. X, No. 4. Lexington, Kentucky: College of Education, University of Kentucky, 1938. Pp. 194. $0.50.

Better Schools for Iowa: A Guide for Study Groups. Des Moines, Iowa: Superintendent of Public Instruction, 1938. Pp. 20.

A Bibliography of Canadian Education. Compiled and annotated by Albert H. Smith and Others. Bulletin No. 10 of the Department of Educational Research. Toronto, Canada: University of Toronto, 1938. Pp. 302. $1.00.

BURSCH, CHAS. *Survey of Schoolhousing Adequacy in California Elementary School Districts Not Administered by City Superintendents of Schools.* State Department of Education Bulletin No. 5. Sacramento, California: State Department of Education, 1938. Pp. x+40.

COLEMAN, CHARLES H. *The Constitution Up to Date: Some Suggested Adjustments for the Federal Constitution.* Bulletin No. 10. Cambridge, Massachusetts: National Council for the Social Studies, 1938. Pp. 48. $0.50.

CONANT, JAMES B. *"Academical Patronage and Superintendence:" An Historical Discussion of the Appointment of Professors in Universities.* Occasional Pamphlets of the Graduate School of Education, Harvard University, No. 3. Cambridge, Massachusetts: Graduate School of Education, Harvard University, 1938. Pp. 30. $0.25.

HALL, SIDNEY B. *Report of the Legislative Commission.* Washington: National Education Association [1938]. Pp. 16.

HENDRIX, WILLIAM SAMUEL. *A Project in the Reception of Cultural Shortwave Broadcasts from Spanish America, with Some Attention to Broadcasts from Europe.* Columbus, Ohio: Ohio State University, 1938. Pp. 40.

HICKER, H. D. *Survey of Physically Handicapped Children in California.* State Department of Education Bulletin No. 8. Sacramento, California: State Department of Education, 1938. Pp. viii+34.

HOCKETT, JOHN A. *The Vocabularies and Contents of Elementary School Readers.* State Department of Education Bulletin, No. 3. Sacramento, California: State Department of Education, 1938. Pp. viii+104.

LOVE, MALCOLM A. *The Iowa Public Junior College: Its Academic, Social, and Vocational Effectiveness.* University of Iowa Studies in Education, Vol. X, No. 3. Iowa City, Iowa: University of Iowa, 1938. Pp. 128.

Nebraska State Teachers Association. Educational Bulletin, Mimeographed Series II: No. 3, "A Teachers' Retirement System for Nebraska" by Galen Saylor and Sub-committee on Retirement of the Educational Planning Commission. Lincoln, Nebraska: Nebraska State Teachers Association, 1938. Pp. 60 (mimeographed).

Occupational Trends in California with Implications for Vocational Education: IV. Trends in the Distributive Occupations. State Department of Education Bulletin No. 4. Sacramento, California: State Department of Education, 1938. Pp. x+102.

"Organizing the School Budget." Accounting Circular No. 10. Des Moines, Iowa: State Department of Public Instruction, 1938. Pp. 16 (mimeographed).

The Relationship of the Federal Government to Negro Education. The Yearbook Number, VII. The Journal of Negro Education, Vol. VII, No. 3. Washing-

ton: Bureau of Educational Research, Howard University, 1938. Pp. 241–474. $2.00.

SMITH, HENRY LESTER, and O'DELL, EDGAR ALVIN. *Bibliography of School Surveys and of References on School Surveys* (Supplement to Vol. VIII, Nos. 1 and 2, Including References to December 31, 1937). Bulletin of the School of Education, Indiana University, Vol. XIV, No. 3. Bloomington, Indiana: Bureau of Co-operative Research, School of Education, Indiana University, 1938. Pp. 144. $0.75.

The Status of Teacher Tenure. Washington: Committee on Tenure, National Education Association, 1938. Pp. 32. $0.25.

STURTEVANT, SARAH M., and REDDICK, VERNA SWISHER. *Recent Books for Deans, Counselors, and Other Personnel Workers: An Annotated Bibliography.* New York: Teachers College, Columbia University, 1938. Pp. 12. $0.20.

TOWNES, MARY E. *Teaching with Motion Pictures: A Guide to Sources of Information and Materials.* Teachers College Library Contributions, No. 1. New York: Teachers College, Columbia University, 1938. Pp. 26. $0.25.

Youth in the World of Today. Public Affairs Pamphlets, No. 22. New York: Public Affairs Committee (8 West Fortieth Street), 1938. Pp. 40. $0.10.

UNITED STATES OFFICE OF EDUCATION PUBLICATIONS:

Bulletin No. 2, 1937—*Statistics of State School Systems, 1935–36: Being Chapter II of Volume II of the "Biennial Survey of Education in the United States: 1934–36"* (advance pages) by David T. Blose and Henry F. Alves and Others. Pp. vi+126.

Bulletin No. 2, 1937—*Statistics of City School Systems, 1935–36: Being Chapter III of Volume II of the "Biennial Survey of Education in the United States: 1934–36"* (advance pages) by Lester B. Herlihy and Walter S. Deffenbaugh and Others. Pp. iv+78.

Bulletin No. 35, 1937—*The School Building Situation and Needs* by Alice Barrows. Pp. vi+62.

Bulletin No. 7, 1938—*Curriculum Laboratories and Divisions: Their Organization and Functions in State Departments of Education, City School Systems, and Institutions of Higher Education* by Bernice E. Leary. Pp. vi+34.

Bulletin No. 193, Trade and Industrial Series No. 55 (1938)—*Training for the Painting and Decorating Trade* by L. G. Stier. Pp. vi+138.

Vocational Education Bulletin No. 192, Trade and Industrial Series No. 54 (1938)—*Training for the Public-Service Occupations* by Jerry R. Hawke. Pp. viii+82.

MISCELLANEOUS PUBLICATIONS

SHULMAN, HARRY MANUEL. *Slums of New York.* New York: Albert & Charles Boni, Inc., 1938. Pp. xviii+394. $3.00.

THE ELEMENTARY SCHOOL JOURNAL

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Educational News and Editorial Comment

*

A New Estimate of Income Distribution in the United States

Students of social conditions will welcome the appearance of another timely publication of the National Resources Committee which bears the title *Consumer Incomes in the United States—Their Distribution in 1935–36*. The first and perhaps the most significant part of the study presents a picture, on a broad national basis, of the division of income among the American people. The second part contains estimates of incomes received by various groups composing the total population, for example, families living in the different regions of the country, families living in rural and urban communities, white and negro families, single persons, and residents of institutions. Readers are cautioned to keep in mind that these estimates of income are expressed in terms of dollars and cents and not in terms of real income. It was not possible to adjust dollar figures to allow for differences in costs of living in different communities, for differences in modes of living of various population groups, for differences in the number of persons dependent on the income, or for differences in the needs of individuals.

Income distribution on a national basis.—Approximately 91 per cent of the nation's consumers are members of families consisting of

two or more persons. In 1935–36, 14 per cent of all families received less than $500; 42 per cent received less than $1,000; 65 per cent, less than $1,500; and 87 per cent, less than $2,500. About 10 per cent of all families received incomes ranging from $2,500 to $5,000; 2 per cent received incomes from $5,000 to $10,000; and only 1 per cent had incomes of $10,000 or more. The 42 per cent of the families with incomes of less than $1,000 received less than 16 per cent of the total national income; the 3 per cent with incomes of $5,000 and over accounted for 21 per cent of the total; and the 1 per cent having incomes of $10,000 and over received a little over 13 per cent of the aggregate.

Of the 10,000,000 single men and women included in the total consumer population, 45 per cent received less than $750; 61 per cent, less than $1,000; and 95 per cent, less than $2,500.

A more comprehensive picture of the distribution of the national income is secured by considering families and single persons together as consumer units. Of the 39,000,000 consumer units comprising the total population, the poorest tenth, with incomes under $340, received less than 2 per cent of the aggregate income. The second tenth, with incomes ranging from $340 to $545, received 3 per cent of the estimated national total. The 10 per cent of the families and individuals receiving the highest incomes ($2,600 and over) received 36 per cent of the aggregate income—about as much as the 70 per cent at the bottom of the scale. The highest 5 per cent received almost as much income as the lowest 60 per cent, and the highest 1 per cent received only a trifle less than the lowest 40 per cent.

Regional differences in family incomes.—Diverse economic conditions in the various sections of the United States naturally result in striking regional differences in family incomes. These differences are shown in Table 1. These figures should be interpreted with some caution, as is suggested in the following quotation.

> It must be remembered in interpreting these differences that the averages are affected by the concentration of very high incomes among families living in large cities, and that these families are relatively more numerous in the New England, North Central, and Pacific states. It must also be borne in mind that the averages for the South, and for the Mountain and Plains Region as well, are

weighted by a relatively large proportion of farm families. Furthermore, it should be recalled that costs of living differ from one part of the country to another, and also that the comparison is for a particular twelve-month period in 1935 and 1936. Any abnormal conditions during that period, such as the drought and wheat rust in the Mountain and Plains area, are reflected in the estimates.

Rural-urban differences in family incomes.—Estimates of the distribution of income among non-relief families in communities of different size are presented in Table 2. The incomes received by

TABLE 1

AVERAGE INCOMES OF FAMILIES IN FIVE GEOGRAPHIC REGIONS BASED ON SAMPLE DATA, 1935–36

Geographic Region	Average Income per Family			
	Median		Mean	
	All Families	Non-relief Families	All Families	Non-relief Families
New England	$1,230	$1,365	$1,810	$2,011
North Central	1,260	1,410	1,786	1,973
South	905	985	1,326	1,431
Mountain and Plains	1,040	1,220	1,363	1,537
Pacific	1,335	1,485	1,775	1,937

farm families, it will be noted, are materially less than those received by families living in villages, towns, and cities. The mean income of farm families is $1,259 compared with a mean income of $1,607 in village communities with populations of less than 2,500 or a mean income of $2,704 in cities with populations of 1,500,000 or over. It is a striking fact that non-relief families living in cities of a million and a half or more people (New York, Chicago, Philadelphia, and Detroit) constitute about 11 per cent of the total number of non-relief families of the nation and receive 17 per cent of the aggregate national income, while farm families account for about 25 per cent of the total and receive 17.5 per cent of the aggregate estimated income. In other words, approximately as much income is received by families living in New York, Chicago, Philadelphia, and Detroit as by all farm families in the United States. As already pointed out,

these are estimates of dollar rather than real income, but in the calculation of farm income allowance was made for the value of food produced at home for the family's own use.

TABLE 2

AVERAGE AND AGGREGATE INCOMES OF NON-RELIEF FAMILIES IN SIX TYPES OF COMMUNITY, 1935–36

Type of Community	Average Number of Persons per Family	Average Income per Family		Aggregate Income
		Median	Mean	Per Cent
Metropolises (1,500,000 population and over)	3.5	$1,730	$2,704	17.1
Large cities (100,000 to 1,500,000 population)	3.5	1,560	2,177	22.9
Middle-sized cities (25,000 to 100,000 population)	3.7	1,360	1,813	10.7
Small cities (2,500 to 25,000 population)	3.7	1,290	1,653	15.2
All urban communities	3.6	$1,475	$2,064	65.9
Rural non-farm communities	3.7	$1,210	$1,607	16.6
Farms	4.5	965	1,259	17.5
All rural communities	4.2	$1,070	$1,408	34.1
All communities	3.8	$1,285	$1,781	100.0

A Unique Contribution to the Program of Reading Instruction

Teachers, supervisors, and superintendents will welcome the appearance of a bulletin published by the California State Department of Education which bears the title *The Vocabularies and Contents of Elementary School Readers*. It was prepared by John A. Hockett, assistant professor of education at the University of California, and was designed as a guide in the selection and the use of reading materials. The first part of the bulletin is devoted to a detailed analysis of the vocabularies of preprimers, primers, and readers; the second part contains elaborate indexes to the content of a large number of primers and readers. The following passage quoted from the Preface indicates the purposes and scope of the publication.

Every teacher in the elementary school has available an extensive or a limited supply of more or less suitable reading books. Whatever the situation, the teacher's problem is continuously that of using most effectively, with many different pupils and for a variety of purposes, the books that are available. A related problem which arises at intervals is that of making a wise choice of new materials to supplement or replace the books previously in use. As schools emerge from the era of the single basic textbook into an era of many books, the number and variety of available reading materials are both greatly increased, and the need for guidance in the selection and use of these many books becomes more urgent.

The first purpose of this bulletin is to present detailed, comparative evidence on the relative vocabulary burden and difficulty of a large number of commonly used readers in the primary grades, so that the various books may be selected and used more wisely and effectively. A tremendous amount of time and energy has been expended in making the data accurate and fair to all of the books included. The figures presented often differ slightly from those reported by other investigators or by the publishers. Such discrepancies are generally due to differences in the rules followed by different investigators. A rigorous attempt has been made to avoid errors and to be consistent in dealing with the various books on each level. The writer has no intention of favoring certain books or of discrediting others. The desire, as stated above, is to further the more skilful use of the various books at hand.

A second purpose is to help teachers guide the reading of children along various lines of interest or need. As teachers organize the work of a class or a group around centers of interest or units of work, they need to be able to refer children to much reading material related to the chosen interest. At various times there is also need for one or more selections about a particular person, place, or event. It may be a poem about the stars, an episode from the life of Lincoln, or a story about maple sugar. The classification of material on a variety of topics on each level from primer to sixth reader, in a large number of series, is presented in Part II to help teachers throughout the elementary school in using the material in the readers which they have available as it may be needed in various classroom situations. Although the material is classified in seven indexes corresponding to the grade levels indicated for the various books, each teacher generally will be interested in two or more of the indexes. There are at least three reasons for this. There are always different abilities in any class of children. Every child can profitably read material that is simpler than that of his own grade level if it relates to a subject in which he is interested. As shown in the tables of vocabulary difficulty, the grade designation of a book does not necessarily indicate that it is more difficult than all books designated for a lower grade or easier than all books labeled for a higher grade.

Supervisors, administrators, textbook committees, and others will find the data on content and difficulty useful in their consideration, selection, and recommendation of books.

Here and There among the Schools

The items selected for reporting in this issue of the *Elementary School Journal* relate to the improvement of reading in the upper grades, curriculum planning in a city school system, a new system of child accounting, an experiment in education by radio, instruction in courtesy, and a plan for keeping teachers and parents informed with respect to the work and the problems of the schools.

Remedial reading at the junior high school level For a number of years teachers in the upper grades of the elementary school, and in the high school as well, have become increasingly sensitive to the fact that many of their pupils are seriously handicapped because of inability to read effectively. The remedy lies in part, of course, in the development of better methods of teaching reading in the lower grades, but, while this improvement is being made—and even afterward perhaps—many pupils will reach the upper grades more or less functionally illiterate. It is entirely indefensible to subject these pupils to a program requiring a reading ability which they do not possess. Either a way must be found to educate pupils who cannot read, or a method must be devised to teach reading in the upper grades and in the high school.

Luckily, this problem of teaching older pupils to read effectively is being attacked in many schools throughout the country. One of the most promising plans that have come to our attention is being carried out in the Roosevelt Junior High School, Aberdeen, South Dakota. The plan is described at length in a mimeographed bulletin of 138 pages which was sent to us by Superintendent Charles J. Dalthorp. The bulletin was prepared by C. P. Stinson, principal of the junior high school, with the assistance of his staff of teachers, and is published under the title "A Remedial Reading Program for the Junior High School."

During 1936–37 a project was initiated to determine the amount of retardation in reading in Grades VII, VIII, and IX and to develop a constructive remedial program. The whole report describing the project is of interest, but teachers will find the fourth and the fifth chapters particularly helpful. The fourth chapter, entitled "Suggestions for Remedial Procedures," presents an analysis of the

procedures used in English, the social studies, mathematics, general science, home economics, and the industrial arts. In the fifth chapter, "Instructional Units in Remedial Reading," the problem is attacked from another angle; a large number of units are developed which are designed to improve ability to read quite apart from subject-matter fields. Among the units developed in this section of the report are the following: unit on the use of books, unit to improve interpretation and comprehension, unit designed to increase rate of reading, and an appreciation unit for Grade IX. In the development of each unit, attention is given to objectives, suggestions, activities, materials, and checking.

Planning the curriculum in a public-school system From Superintendent Paul J. Misner, Glencoe, Illinois, we have received a bulletin of some 170 pages which bears the title "A Guide for Curriculum Planning." The bulletin is described as "a co-operative study of educational policies and procedures, designed to facilitate the growth and development of children within their environment." The content is organized under the following major topics: "The Frame of Reference," "A Design for Living," "The Major Integrative Theme," "Functions of the Social Heritage," "Guidance and Evaluation," and "Toward Community Education." The curriculum outlines presented here reveal vividly and in detail the kinds of activities being carried on in the Glencoe schools. The publication should be of interest to curriculum builders everywhere and especially to those who are working out a program "designed to help bring about wholesome correlation and to break down the artificial subject-matter barriers which have been set up by departmentalization." The price of the bulletin is two dollars.

New system of child accounting in New York New York City has adopted a new plan of reporting pupil progress and a new type of permanent record card which will be employed generally throughout the school system for the first time this autumn. The report card provides for detailed information concerning the pupil's progress in citizenship training, showing whether he is developing desirable traits. It will also indicate the

progress that the pupil is making in his studies and will contain suggestions for needed improvement. An important feature of the report is the school's estimate of whether the pupil is progressing as rapidly as his ability indicates he should.

The new record card is cumulative and is so designed that a single card will serve a pupil throughout his school career. It provides for the recording of information about the social background of the child, his personality, mental ability, achievement in standardized tests, special interests, aptitudes, and the like.

An experiment in education by radio in Cleveland

Nation-wide interest attaches to the experiment which is now being made in the use of the radio in the schools of Cleveland, Ohio. The experiment has been made possible by a grant from the General Education Board. A broadcasting studio has been installed in the administration building, and each school is equipped with a receiving set. The purpose of the experiment is to test new techniques and to try out new ideas. The program to be put into operation is described in the *Christian Science Monitor* as follows:

> Before the end of the term, school officials expect to add programs for junior and senior high school students, which will be largely pioneering work. They also are considering such things as biographical presentations, lessons in vocabulary building, spelling contests, quiz bees, current events, historical dramatizations, reading of poetry, working pupil activity into the school radio, use of the station for adult classes in the evening, and broadcasting of talks by nationally known people visiting Cleveland.
>
> The real experimental phases, however, will be attempted gradually, for the school executives directing the station believe it unwise to "try everything at once." The greatest emphasis will be placed on developing classroom broadcasts that will fit directly into the regular course of study, rather than being supplemental. In this way, the radio programs virtually will become the curriculum in action, a method in which the Cleveland use of school radio differs from that in most other cities.

Instruction in courtesy a worth-while addition to public-school curriculum

W. E. Sheffer, superintendent of schools at Manhattan, Kansas, has supplied us with the following statement describing a program of instruction in courtesy which he initiated in his schools last year and which is being continued in the current year.

One of the major projects of the year was instruction in courtesy and the placing of special emphasis upon courteous conduct. Early in the school year a meeting was held of principals, representatives of the units of the parent-teacher organizations and teacher sponsors of various groups in the schools to plan for the development of a desirable and effective program for instructing the pupils in the elements of courtesy and in the practice of courteous conduct not only in their school relations but in all their relations with other persons.

All the teachers gave special attention to the subject throughout the year, and, as a result, evident and measurable results were achieved as reported by parents and teachers. In May a second meeting was held of those persons who had attended the fall meeting. The reports of achievement made by the different members of the group were altogether gratifying. While the results of instruction in such a subject cannot be measured in the same manner as can those deriving from most academic subjects, there can be many evidences of the effectiveness or failure of the instruction. It is believed that the project was highly worth while as shown in the improved conduct of many of the pupils.

Facts about the schools for teachers and parents Good administration requires that both teachers and parents be kept informed about the educational system—its purposes, program, organization, personnel, financial support, and other matters. V. L. Beggs, superintendent of schools in Elmhurst, Illinois, is accomplishing these ends in an effective way through two publications which are sent to teachers and parents at regular intervals. "The Interlocutor," a mimeographed bulletin of some eight pages, is sent to teachers about every two weeks. It contains a great variety of information about such matters as the schools' financial status, curriculum and research, teachers, professional notes, radio programs for schools, and the like. The second bulletin, entitled "Your Child in School," is sent to parents three or four times a year. It serves as an organ for keeping parents informed with respect to the policies and the practices of the schools.

Educational Program of the Tennessee Valley Authority

Newspaper accounts of the work of the Tennessee Valley Authority might lead one to suppose that it is a "giant organization" designed primarily to provide cheap power and light to the people of the valley area. The better informed reader, however, is aware that the Authority is also concerned with such matters as

flood control, navigation, soil conservation—in short, with an economic and social program which looks to the improvement of the quality of individual living in the whole region. Relatively few persons are aware of the really significant educational program which the Authority is undertaking to implement. This program is described in detail in a recently published bulletin of the Bureau of School Service, College of Education, University of Kentucky. The bulletin is edited by Maurice F. Seay and bears the title *Adult Education: A Part of a Total Educational Program.* The following paragraph is quoted from an introductory statement by Frank L. McVey, president of the University of Kentucky.

> My interest in the papers brought together in this bulletin arises out of the fact that one of the best things the T.V.A. has done and one to which little attention has been given is the educational program which it has set up. If this program were the ordinary one that is typical of town or country school systems, I should not be much interested, but what has been done, described in this bulletin, is a real contribution to education. . . . . The fact that the Authority did not follow conventional procedures in working out an educational and recreational program has been of great benefit, not only to the Authority and the people in the area, but the experience gained has done much for any administrator, teacher, and citizen who is interested in education. Hence this bulletin.

In at least one respect the educational work of the T.V.A. is unique in the history of American education. It represents the most extensive effort yet made to develop an integrated, co-ordinated educational program for all the members of a community—children as well as adults. The various educational agencies and activities to be found in the typical American community have never been satisfactorily co-ordinated. For example, adult education is commonly regarded as something separate from the general educational process; the school and the library have rarely or never succeeded in integrating their educational programs; the health service for children is seldom centralized in any one agency; and recreational interests and needs are met in a variety of ways and with little or no effort at co-ordination. The T.V.A. is attempting to develop a unified program in which the educational interests and needs of all the members of the community are given a place, and it is trying to work out a form of administrative organization which co-ordinates all the educational agencies of the community.

The general principles underlying this effort to bring unity and balance into the educational work of a community are discussed in the following passage quoted from the bulletin.

The conception that education is continuous is, of course, not new. However, the application of this conception to a planned program of education for all age levels of a community has seldom been attempted. Citizens hear and read much of the community's high-school program; somewhat less, perhaps, of a community's elementary school; occasionally something of the other educational services, such as the library, recreation, nursery school, and classes for adults. Almost never do they hear or read of the total educational program of the community—all of these regular and special phases of education so coordinated that the whole is a well-balanced and adequately supported program for children and adults.

The present program of education in most communities with many educational services functioning independently, receiving their support from varied sources, and being administered by unrelated agencies, reflects a confusion that exists in educational thought. The situation contains the unfortunate implications that education is not continuous and unified but that it is a matter of a little "bit" here and some more *there* and *there*—depending usually upon the individual aggressiveness of each of the educational agencies functioning in a community. This situation also implies that education is primarily academic and theoretical and has little, if any, relation to real, everyday, meaningful experiences. Thus subject matter and special educational services are departmentalized and isolated.

This confusion can be explained more easily by listing the various agencies which supply a part of the total educational experience of a life-cycle. The Sunday school, the W.P.A. or a private nursery school and kindergarten; the local public-school system with its elementary, junior, and senior high schools; the Scout organization; the Y.M.C.A.; the city recreation department; the city library; the public health unit—all frequently contribute to the unplanned education for an individual.

In the T.V.A. town of Norris, Tennessee, these separate agencies do not now exist. The community's total educational program is administered by a superintendent of education. The nursery school and kindergarten, the elementary and secondary schools, the recreational program, the public library, the health unit —all are parts of a planned program, receiving their support and their supervision from the same source through a combined budget. Space and equipment, time scheduling of classes and programs, staff allocations, etc., are carefully planned in this centralized administration. In this respect the Norris plan represents the ideal, but unfortunately it would be extremely difficult to inaugurate such an organization in a community where different agencies have become established and have become generally accepted parts of the social *status quo*. However, the local public-school system, the public library, or some other exist-

ing agency could expand its program to include some of these activities and could assume a leadership in developing and sponsoring procedures for co-ordination of the activities of the different agencies.

The experience of the T.V.A. and the agencies co-operating with it in attempting to secure a well-balanced and well-planned program of education for communities that are served by many agencies indicates that this leadership can more effectively come from the public-school system or the public library. The schools have the largest program, touch the greatest number of people, are staffed with trained persons, and are more likely to receive increased financial support. The library, as an indispensable service agency for all educational activities, is in a position to render a much larger service than at present and to accomplish, as an indirect result, much co-ordination of educational activities. The important problem, however, is not which agency will lead but rather how to get one agency at least to see and act upon the opportunity.

Education is continuous and thus it transcends administrative divisions. It demands, for most effective results, that the educational activities either be centralized in one agency or co-ordinated by the co-operative efforts of all agencies to the end that the confused situations of today be replaced by a planned, well-balanced, and adequately supported educational program for all age levels.

Help and Advice in Securing Films for Schools and Colleges

Announcement has been made of the establishment of a non-profit corporation to be known as the Association of School Film Libraries. The association is being financed by the General Education Board, and it will have its main offices in the Time and Life Building, 9 Rockefeller Plaza, New York City. The executive director is Fanning Hearon, who will be assisted by a board of directors composed of persons prominent in the field of visual education. Membership in the association will be limited to educational institutions and noncommercial distributors serving the educational field. For these members the association will obtain appraisals of films which are available or which could be made available. It will help members obtain films, but it will not itself produce films. It will be simply a helpful, impartial liaison unit between picture makers and picture users.

More specifically, the purposes of the association are stated as follows:

1. To act as a clearing-house for information on the production and distribution of educational films to schools and colleges.

2. To act as a central agent for the co-operative procurement of films for its members.

3. To compile standard catalogue materials on all films available for educational use.

4. To gather and relay to its members evaluations of films secured from various sources.

5. To open new sources of educational films.

6. To mobilize the purchasing power of the educational motion picture field in order to secure better production at a lower cost.

7. To serve as a liaison between educational motion picture makers and users.

8. To be the mouthpiece of the distributors and exhibitors, to speak for them in one voice.

The following advantages are claimed for membership in the association.

1. Through membership in the association all films can be ordered from one source instead of several.

2. The association will act as a clearing-house for information on motion pictures available separately from hundreds of organizations.

3. Films probably will be made available through the association which will not otherwise be released. For instance, films of the Commission on Human Relations of the Progressive Education Association cannot be distributed commercially, and the Progressive Education Association is not in a position to distribute them. Similarly, short subjects recommended for release by the educational advisory committee of the Motion Picture Producers and Distributors of America, Incorporated, probably will not be readily available for school use through commercial distributors nor through any other agency.

4. Individuals and institutions have little influence in getting desirable educational films produced and released, but collectively they can make themselves heard.

5. Through the association is available the collective experience of all its members in methods of selecting, previewing, and evaluating films.

6. If film users pool their orders, they can reduce the costs of distribution to producers and eventually effect a corresponding reduction in prices.

7. Through the association assistance will be given to institutions in the establishment of new film libraries, thus expanding the market. In this way future profitable production of educational motion pictures can be assured.

Superintendents and others who feel the need of assistance in obtaining films for use in the schools will also be interested in a pamphlet recently published by Teachers College, Columbia University. The pamphlet was prepared by Mary E. Townes and carries the

title *Teaching with Motion Pictures: A Guide to Sources of Information and Materials.* Part I, "The Educational Film as a Teaching Aid," contains annotated bibliographies on such topics as the following: basic books, research studies, periodicals, organizations and agencies, source list of distributors of educational films, and source list of educational films. Parts II and III are devoted, respectively, to "The Theatrical Film as an Educational Force" and "Making Motion Pictures in the School." The pamphlet should prove especially helpful to those who need a practical guide through the mazes of material on the motion picture in education, and it should serve, too, to suggest new paths to be explored.

A Report on Important Phases of Instruction in the Elementary School

For a number of years the State Education Department of New York has held an annual conference of supervisors and directors of instruction in elementary schools. The recently published "Report of Proceedings of the Fourth Annual Conference" has in it materials which should be of interest to elementary-school teachers and principals throughout the country. The report contains abstracts of the following committee reports: (1) "School-Home-Community Relationships," (2) "The Influence of Changing Conceptions of Education upon the Function and Organization of Supervision," (3) "Criterions for Determining the Success of the Elementary School," and (4) "Adaptations to the Needs of Superior Pupils."

An Example of Basic Material for Curriculum Revision

The school should seek to orientate the child in his environment, to cultivate in him an understanding of the time and place in which he is to grow and develop. It was with this end in view that the State Department of Public Instruction in Michigan had prepared a bulletin entitled *Michigan Today.* The bulletin is the third publication of major scope to appear in the Michigan program of curriculum revision. The two earlier publications were entitled *Instructional Guide for Elementary Schools* and *What Does Research Say?* The general purpose of *Michigan Today* is described in the Preface as follows:

In the preparation of this bulletin the authors have had one major purpose in view: to present clearly, simply, and accurately such facts concerning the physical and human resources of Michigan as will enable educators to adjust the school curriculum in the light of the implications these resources have for the education of children. To achieve this end the authors have described *Michigan Today* in such a way as to stimulate the understanding and imagination of the reader. It is hoped that the picture of Michigan here presented will give the reader impressions which will guide him in a choice of further studies of the resources of the state and their effect on education. An understanding of the social and economic status of Michigan with its educational implications will help to erect a series of guideposts for the construction of a new school curriculum.

Among the chapter titles are the following: "The Geological and Physical Features of Michigan," "Land and Forests," "Mineral Resources," "The People of Michigan," "The Family," "The Community," "The Government," "Transportation and Communication," "Unemployment in Michigan," "Occupations," "Social Planning and Social Change," and "The Role of the School as a Social Institution."

Who's Who for November

The authors of articles in the current issue B. F. Pittenger, dean of the School of Education of the University of Texas. Paul Fendrick, assistant professor of education at the State College of Washington, Pullman, Washington. Charles A. McGlade, superintendent of schools at Pullman, Washington. Cloy S. Hobson, superintendent of schools at Genoa, Illinois. O. L. Harvey, engaged in research in Washington, D.C. G. T. Buswell, professor of educational psychology at the University of Chicago. Warren W. McSpadden, instructor in science at Walt Whitman School, New York City. Anne E. Pierce, head of the Department of Music in the Experimental Schools and assistant professor of music at the University of Iowa. William G. Whitford, associate professor of art education at the University of Chicago. Homer J. Smith, professor of industrial education at the University of Minnesota. Beulah I. Coon, agent for studies and research in home-economics education in the United States Office of Education. Evangeline Colburn, teacher-librarian in the

University Elementary School of the University of Chicago. D. K. BRACE, professor of physical education at the University of Texas.

The writers of reviews in the current issue V. L. BEGGS, superintendent of schools in Elmhurst, Illinois. G. A. YOAKAM, professor of education and director of courses in elementary education at the University of Pittsburgh. HENRY J. OTTO, consultant in education of the W. K. Kellogg Foundation. FRANCIS F. POWERS, associate professor of education at the University of Washington. HELEN E. RICHARDSON, teacher of history and geography in the University Elementary School of the University of Chicago. CLYDE B. MOORE, professor of rural education at Cornell University.

THE TEACHER IN THE MODERN SCHOOL

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THE SCHOOL MAKES THE TEACHER

THERE is a trite but truthful maxim, which has formed the text for countless essays concerning the importance of teachers, to the effect that "as is the teacher, so is the school." This article seeks to emphasize an opposite relationship which is, possibly, not so familiar but is just as true, namely, that the concept of the school and its purposes which prevails in any society determines that society's concept of the teacher and his functions. Stated in form similar to the older maxim, it may be said with equal truth that *as is the school, so the teacher must be.*

Convincing evidence that there is truth in this assertion may be found abroad today in those countries which have adopted the theory of the totalitarian state. It makes little difference whether one selects as an example Soviet Russia or Fascist Germany or Italy. In each of these countries the school is regarded as a major instrument for political propaganda. Its business is to build citizens for the state and members for the controlling party according to a general and preconceived pattern. The discharge of this business calls for teachers with well-defined abilities and political points of view. Their loyalty to prevailing political principles must be unquestioned, and ability to promulgate these principles is their chief professional qualification. The nature of the political state, as these examples show, often gives a character to its schools which largely determines the requirements made of teachers.

It is not necessary, however, to go abroad nor to invade the field of national politics to demonstrate that teachers are formed by the schools, as well as schools by the teachers. In our own country every change and development in the school's responsibilities has been reflected in the demands made on teachers. When the three R's

prevailed in the elementary schools and Latin and Greek in the secondary schools, the teachers were of the sort that made good drillmasters. The rise of vocationalism as a school objective put a premium on teachers with other interests and qualifications. The current emphasis on education for democratic living is shown in the demand for teachers with democratic sympathies and understanding. State teacher-certification laws, local practices in the employment and the promotion of teachers, and the requirements for admission and graduation maintained by institutions for teacher preparation—all change from time to time and from place to place in accord with shifts in the prevailing concepts of the objectives and the purposes of schools.

CHARACTERISTICS OF THE MODERN SCHOOL AND IMPLICATIONS FOR TEACHING STAFF

These remarks have been offered by way of justification for the theme of this article. There is no point to a discussion of the teacher in the modern school except on the theory that the modern school is different from its predecessors and that the difference in some way or ways affects the character or the status of teachers. The procedure suggested is to locate and describe the more important of these differences and to estimate their effects. It must be observed, in passing, that the *modern* school is not identical with the *contemporary* school. Not all contemporary homes are modern homes, and so with schools. The term "modern schools" is taken here to mean the comparatively small number of present-day schools which are organized and conducted according to modern rather than traditional principles.

The modern school is child-centered.—One characteristic of a modern school which definitely affects the qualifications required of teachers is its increasing concern with children instead of subject matter. The modern school is more child-centered, and less subject-centered, than was its predecessor. Its business is the education of human beings, not the promulgation of favorite "disciplines" or subjects. This statement need not commit one to a defense of all that is argued by extremists in the name of the child-centered school. It means only that the modern school seeks as its end the selective

development of children. Subjects are only a means to this end, not ends in themselves; and subjects, as ordinarily conceived, are only a portion of the means.

The implication of this characteristic is that teachers should be specialists in child nature as well as, and even more than, in subjects. They should be thoroughly informed about children. Their preparation must include instruction in the physiology and hygiene, the growth, and the mental and social development of children. They must also learn to know children through intimate association. Directed observation of children should be as much a part of modern teacher preparation as is directed observation of the teaching act. The accumulation of scientific facts about children is essential, but not enough; the modern teacher must be able to enter vicariously into the minds and hearts of children and to regard the world, the school, and the educative process from the point of view of the child as well as that of the adult.

The modern school is concerned with individuals.—The modern school is concerned with children individually, not merely with children en masse. The education of children is accomplished through the individual education of each child. Knowledge of averages will help in understanding individuals, but it is individual children, not average children, who are important. This fact is a natural consequence of the shift from the subject to the child as the center of the school's activities. The subject-centered school tends to treat children as receptacles into which subject matter may be poured and to regard children as generally alike except for size. Some are larger than average and will receive subject matter more readily and hold it in larger quantities; some are smaller and can hold less. The child-centered school, on the other hand, regards the child as an organism whose education is a matter of active acquirement and growth.

The difference between these conceptions of children as individuals and as averages may be illustrated by the contrast between the institutional and the family attitudes toward children. In an institution a child is thought of as an inmate. He is just one among many—and the many absorb the attention of the institutional staff almost to the exclusion of the one. In a home each child in the family is an individual in his own right. He is fostered and loved for him-

self. However numerous the family, no true parent thinks of it as an abstraction. Every child therein is individualized in a very personal way. Such is the attitude of the modern school. It is with this meaning, rather than with the older legalistic meaning, that the modern teacher may be said to stand *in loco parentis.*

The modern school recognizes both cultural and vocational objectives.—Another characteristic feature of a modern school is its cordial acceptance of both cultural and vocational objectives. At last it has become evident that there is no necessary conflict between these two sets of basic aims. Both are necessary to complete living, and neither is possible of satisfactory fulfilment without the other. If education is for life and if life includes work, then surely one object of the school must be education for vocation. If life is more than work, it likewise follows that the school must have a correspondingly larger aim. The modern school in modern society seeks to equip each pupil, to the limit of his capacity, both for making a living and for making a life.

Cultural objectives are sought through what is now called "general education," the purpose of which is to prepare the student for efficient living on a high plane. Along with mastery of the tools of learning and with preparation for citizenship activities, preparation for efficient living is a recognized goal of elementary-school work and becomes increasingly significant at the high-school and junior-college levels. In many colleges today the work of the Freshman and Sophomore years is being largely made over to provide better facilities for general education. The logic of the movement is bringing a similar revamping of the senior high school program, while the exploratory program of the junior high school has recognized this objective from the beginning.

The implications of these facts for teachers at all these levels seem evident. If enlightenment is an objective for the student, it must be a possession of the teacher. General education for students cannot be satisfactorily provided by narrowly trained teachers, however numerous and comprehensive in total may be the fields that they represent. Teachers must embody the essentials of world-culture as individuals, not merely as a total group. The impact of each teacher on each pupil is determinant of the efficiency of general education.

Vocational education finds a place in the modern school, not fo itself alone, but also as a part of enlightenment. The efficient pu suit of a vocation is an indispensable part of complete living. A voca tion is not merely a way of making a living; it is an integral portio of life itself. In fact, one might argue that it is the co-ordinatin center of every life, giving the life purpose and meaning, and tha this characteristic, rather than personal economic consideration establishes the status of a *vocation.* An individual's vocation, fro this standpoint, is his major life-activity, that about which he thinl and does most during a whole life's span. The fact that this mai life-activity is also the means by which most persons make the livings is, in a sense, an economic accident; but it is a real fa nonetheless.

Vocationalism in the modern school presents two large aspect One is guidance; the other is vocational training or preparatio Guidance looms large in the earlier stages of the child's scho career. Selection must be made, or at least assumed, before specif preparation can begin. Vocational selection, however, is largely trial-and-error process under guidance. Among other things, ther fore, guidance calls for practice in varied and generalized vocation activities—practice which, after selection has been made, becom the basis for more specific vocational preparation. It now seen likely that in the future such vocational preparation as is provide in the schools will be largely of the basic exploratory or guidan sort. There are relatively few vocations for which the public scho can be expected to offer adequate specific training.

The point at issue here is the part, if any, that the general or no vocational teacher should have in this matter—and the conseque reflection on his qualities and training. Heretofore the schools ha depended largely on special teachers and guidance officers for all th work, but there is much to indicate that in the soon-to-be mode school all teachers will have a part to play, at least in the guidan function and at the elementary-school level. Vocational guidance but a part of the larger problem of educational guidance, and tl latter, in turn, is a part of individual life-guidance. The implicatic is that teachers in general will need to understand and to appreciat more than many of them have in the past, the significance of tl

vocational element in life and education and to broaden their knowledge about vocational opportunities in the modern world. In the larger schools they will doubtless be assisted by specialists, but even here the responsibility of the general teacher cannot be eliminated. The smaller schools must, of course, continue to rely on such service as the general teachers can render, or go without anything of the kind at all.

The modern school is concerned with social training.—Perhaps the most conspicuous feature of the modern school is its concern with the social and the civic aspects of education, growing out of a revival of its original primary obligation. Public education in a democracy exists for democracy's preservation and improvement. The public free school in this country is primarily an agency for extending the democratic way of life.

Public education in America is based on the idea of the taxation of all wealth for the education of all children. Although imperfectly realized in practice, this idea is today generally accepted by both educators and the general public. It was not always so. When proposed more than a century ago, the idea was condemned as unfair, un-American, unconstitutional, and even worse. The taxation of one man's property for the education of another man's child was stigmatized as "robbery." The answer to this criticism which prevailed at the time was that every person, rich or poor, is responsible to the extent of his means for the welfare of his country and that the security of a democracy rests on the intelligence and the information of its citizens. This philosophy underlay the establishment of the American free public school.

For several generations, during the period of continental exploitation which seems now drawing toward a close, this original concept of the major function of the public school in this country underwent a change. Emphasis was then given to the idea that the citizen has a right to education by the state, rather than that the state has a right to educated citizens. The emphasis was on the rights of citizens and the duty of the government, instead of the duty of citizens and the rights of government. Free schools were advocated as the means for equalizing differences in economic and cultural advantages, for placing the poor boy in a better competitive position in relation to the

inheritor of wealth, for putting all citizens on a more nearly equal footing in the race for profits and position. In individual cases the opportunity for free schooling was often regarded and used as a means for securing personal advantage. Not a little of our publicly supported professional education is still exploited in this way. The free public school then became the recognized instrument for realizing the conventional American doctrine that "anybody is as good as anybody else, and (if one's self or one's offspring) maybe a little better."

Doubtless public education must recognize the rights of citizens and the duty of government, but it must also recognize the duty of citizens and the rights of government. Both concepts have a necessary place. The modern school differs from its immediate predecessor in that it has revived the theory under which public education took its start. It differs from its original progenitor in that it also recognizes the rights of individuals to free and equitable opportunity for educational development. It recognizes that democratic government is maintained for the welfare of its citizens and also that citizens must be educated to become capable and well disposed for the discharge of their duties toward the political state.

Except for a portion of the press, school people in this country seem more clearly aware of the nature of the democratic order than almost any other identifiable personnel group. The masses of American citizens seem much confused about it, and this confusion is largely responsible for our political and economic ills. To the average American, democracy is a form of government rather than a way of life. So long as his right to vote and to criticize his government continues, he thinks that he is enjoying a democracy. If he reflects any more deeply, he stops with economic considerations. Democracy then appears as a condition of affairs which permits him to vote and to criticize, which controls his competitors, and which leaves him alone with his business or perhaps gives him a subsidy when needed. He seldom gets down in his thinking to the deep underlying stratum of protecting and increasing human happiness; yet it is at this level where real democracy, as the modern school conceives democracy, must exist.

There is a group of thinkers who maintain that sociology is the

starting and the returning point—the mother, so to speak—of all the fields of social science. Economics and politics are means to social ends. Ultimately, economic and political problems lead into problems concerning the social well-being. Translated into terms appropriate to this article, this doctrine means that democracy is essentially social. Political democracy is only an instrument for maintaining economic and social democracy; and economic democracy, in turn, is a means toward, and is measured by, social democracy. Social democracy, in its turn, is the diffusion to the widest possible extent of the greatest possible freedom among all the members of the social order. Thus is the phrase "democracy as a way of life" interpreted. That government is most democratic, whatever its form, which is most successful in establishing and perpetuating a social democracy.

Social democracy as thus conceived is not "socialism" as generally defined. Its objective is the individual, not society as such. The essence of democracy is individualism. It is composed of individuals; it exists for the benefit of these individuals; and its form is dictated by the needs of these individuals. On the other hand, democracy is not individualism run wild. In a democracy the right of every individual to the largest possible share in human happiness is restricted by the one fact that every other individual in the democracy has the same right. The essence of democracy is, first, to protect this right of every individual from the encroachments of other individuals who are pursuing their identical rights and, second, to encourage and help each individual in any way that does not involve subtraction from the balanced rights of others in the society. In the third place, in a democracy promotion and protection of the rights of individuals are achieved through the initiative and the support of the very individuals whose rights are being promoted and protected.

The modern school seeks to build citizens for a social as well as a political democracy. If these ends are to be accomplished, it is necessary that teachers understand both social and political democracy and that they devotedly support democratic institutions. It is essential that teachers in the schools of a democracy be "democrats" in their sympathies and understanding. This statement does not mean

that all teachers must support one political party or that their social, economic, and political opinions shall be of the same complexion; it means that they should subscribe to that theory of democratic individualism upon which true democracy is based. They should be disciples of the democratic way of life.

I realize that there are persons who will regard this declaration as inconsistent with "freedom of teaching." Such persons appear to believe that democracy is not democracy unless its teachers, like other citizens, have complete freedom of speech in political matters, even to the extent of undermining democracy. This belief seems to me to say that democracy is not democracy unless it, alone among all the forms of government known to man, denies itself the right and the duty of preserving and defending itself. The essence of democracy, to these persons, is its right to commit suicide.

I believe that totalitarian principles are as subversive of democracy as democratic principles are subversive of totalitarianism. Democracy can no more survive the effects of totalitarianism in schools than Fascist or socialistic governments can survive the teaching of democracy. The schools of a democracy, like those of a totalitarian state, must sustain and support the society that supports them. The attempt observed in some places to exclude from the schools of this country even the mention of other forms of government is, of course, as ridiculous as it is futile; but that American teachers should be *democrats*—and not socialists or monarchists, or communists or Fascists—is to my mind an axiom of the first order. Teachers comprise the one great organ of the democratic state that creates and purifies its lifeblood. Surely democracy has the unqualified right to assure itself that this vital organ does not pump it full of poisons.

Besides accepting democratic principles, teachers should be skilful in educating boys and girls to become worthy citizens. They should appreciate the importance of emotional as well as intellectual preparation. Democracy is as much a matter of feeling and attitudes as it is of understanding. The basic social attitudes established in each child's early life become a sort of second nature which is hard to change and which continues as a frame of reference for the citizen's thinking and acting in his later years. Increasingly as the child

grows older, these emotional attitudes are given concrete direction through the cultivation of his intellect and understanding. Here arises the question of indoctrination, which must be reserved for discussion in another place.

SUMMARY

This article has argued that the school makes the teacher, as well as the teacher the school. The prevailing concept of the school and its functions indicates the types of personalities who should be selected to teach and the kinds of equipment that should be given them. These claims are well illustrated by the demands that are made on teachers by the modern school. The ideal modern teacher is not a mere drillmaster or a disciplinarian or a book-worm, but rather a socially intelligent and enlightened person who has both a scientific and a human understanding of children and who is devoted emotionally and intellectually to the democratic way of life.

A VALIDATION OF TWO PROGNOSTIC TESTS OF READING APTITUDE

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THIS study reports an inquiry to determine the predictive value of two well-known measures of reading aptitude when related to an objective criterion of first-grade reading achievement. The subjects for the experiment were first-grade pupils in the schools of Pullman, Washington. This study appeared to be warranted, not because it was novel, but because a school administrator is often confronted with the practical problem of passing judgment early in the school year on those children who may not make normal progress in the typical first year of reading instruction. Valid predictive evidence is essential if reliable guidance for the individual pupil is to be effected. The initial capacities of some children presenting themselves for first-grade entrance might be so disparate that a postponement of the reading program is warranted.

The Detroit First-Grade Intelligence Test had been given regularly to entering first-grade pupils in Pullman for a number of years. Under the existing regulations a child could enter school at the beginning of the year with a minimum chronological age of five years and seven months. While, in general, the available evidence indicates that children who rank higher in mental age are likely to make better reading progress, there are a number of exceptions to the hypothesis advocating an optimum minimum mental age of six years and four months.[1] It was recognized that reading, admittedly a complex process, requires other prerequisites than that of mental age; yet the matter of expediency demanded that some categorical decision be made in connection with questionable cases. An extensive

[1] Elizabeth B. Bigelow, "School Progress of Under-Age Children," *Elementary School Journal*, XXXV (November, 1934), 186–92.

study involving the interrelationships of such factors as the home background, education and intelligence of the parents, interests of the home in the school, as well as the child's many physical and personality attributes, would have involved extensive inquiry incompatible with facilities for an early disposition. An experiment to team up the Metropolitan Readiness Tests with the Detroit First-Grade Intelligence Test was, consequently, decided on in order that the combined predictive possibilities of these tests might be determined in terms of first-grade reading achievement.

The following report indicates the results obtained for pupils entering Grade I in the Pullman schools during one school year. The reading achievement of these pupils was tested at the end of the year by means of the Gates Primary Reading Test. Validating criteria were established in terms of reading-grade status by averaging the grade positions for the three tests constituting the Gates test battery. The authors of the Metropolitan Readiness Tests indicate that ordinarily children who score below 60 and who are six years of age or older (a statement which apparently also implies an equivalent mental maturity) at the time of the test are unable to make satisfactory progress in first-grade school work as judged by scores on reading-achievement tests given at the end of the year.[1] They admit, however, possibilities of exceptions to this generalization.

Complete data were available for sixty-six first-grade pupils. Fifty-three of these made satisfactory progress in reading, and thirteen did not. A product-moment correlation of $.94 \pm .01$ was obtained between the scores made on the Detroit First-Grade Intelligence Test and those on the Metropolitan Readiness Tests. This correlation appeared exceptionally high and presumably implied a high correspondence in the abilities measured by these two tests. In light of this finding it might seem that the Metropolitan tests measured components very similar to those measured by the Detroit test and that the additional test did not contribute substantially to the discriminatory criteria. An examination of the reading achievement available at the end of the year offered an opportunity to confirm this hypothesis. These data are presented in Figure 1.

[1] Gertrude H. Hildreth and Nellie L. Griffiths, *Metropolitan Readiness Tests—Manual of Directions*, p. 17. Yonkers-on-Hudson, New York: World Book Co., 1933.

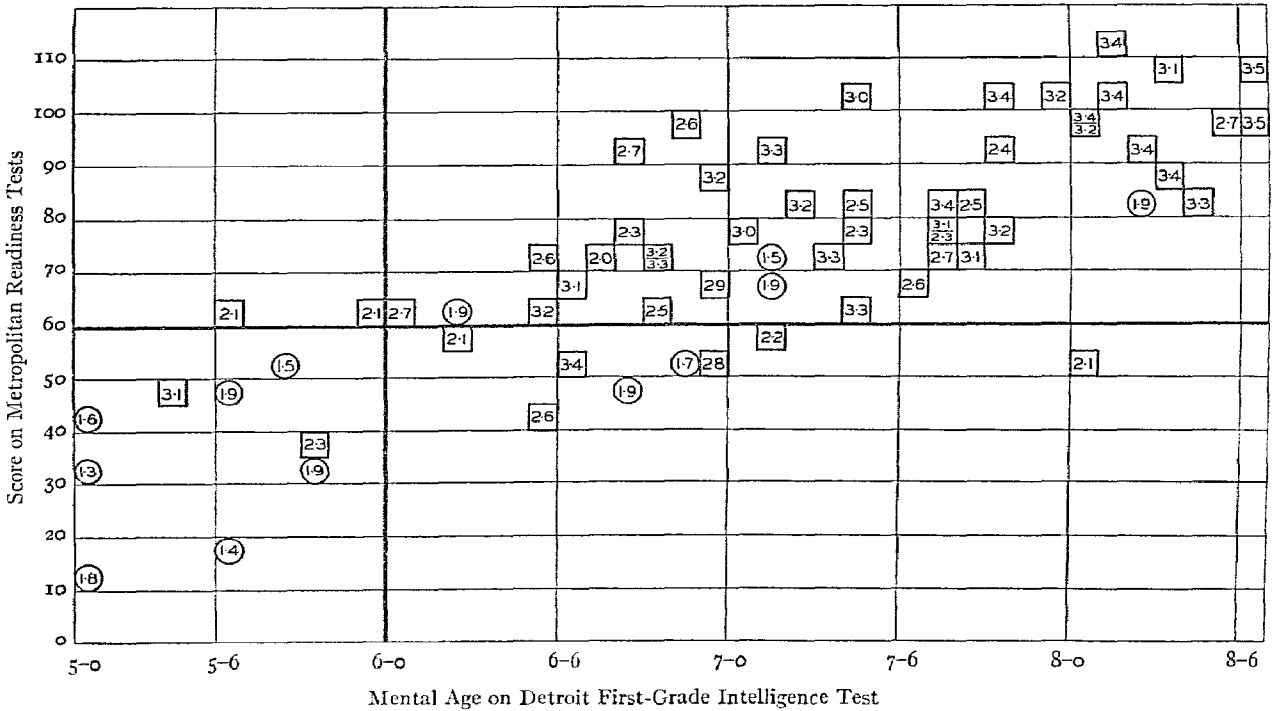

FIG. 1.—Placement of sixty-six pupils on Detroit First-Grade Intelligence Test and Metropolitan Readiness Tests. (Squares indicate pupils who made adequate progress in reading; circles, those who made inadequate progress. The numbers inserted indicate the reading grade at the end of the year, two numbers in a cell indicating two pupils at that level.)

A break-down of the incidence of pupils making scores below or above 60 on the Metropolitan Readiness Tests gives the results shown in Table 1. These results indicate that prognosis on the basis of the Metropolitan Readiness Tests alone did not fully differentiate pupils at the beginning of the year who actually made satisfactory

TABLE 1

DISTRIBUTION OF PUPILS SCORING BELOW AND ABOVE 60 ON METROPOLITAN READINESS TESTS ACCORDING TO READING ACHIEVEMENT AND ACCORDING TO MENTAL AGE ON DETROIT FIRST-GRADE INTELLIGENCE TEST

	Number of Pupils with Scores on Metropolitan Test	
	Below 60	Above 60
Total number of cases	17	49
Pupils with adequate reading achievement on Gates test:		
Mental ages above six on Detroit test	6	43
Mental ages below six on Detroit test	2	2
Total	8	45
Pupils with inadequate reading achievement on Gates test:		
With mental ages above six on Detroit test	2	4
With mental ages below six on Detroit test	7	0
Total	9	4

reading progress in the first grade, that is, achieved one grade of reading progress. Only 49 of the 66 cases (74 per cent) made scores on the Metropolitan Readiness Tests which, if considered alone, warranted a prediction of potential reading success. Again, eight of the 17 children (47 per cent) who scored below 60 on the Metropolitan Readiness Tests, actually made normal reading progress. Furthermore, when the mental ages of the questionable cases (those having scores below 60) were taken into account, a significant multiple probability favored the hypothesis that, whenever a mental age

of at least six years was identified with a score below the critical Metropolitan rating, the possibility of adequate reading achievement was increased.

Conversely, there was not a single instance in the group scoring above 60 on the Metropolitan tests with a mental age below six years where inadequate reading was found. When the categorical criterion of a score of at least 60 on the Metropolitan tests was used, there were, in the group of 49 pupils, 45 (92 per cent) who made adequate reading achievement. The incidence of pupils having a mental age below six years and also a favorable score on the Metropolitan tests and adequate reading achievement was negligible—only two instances out of 45 (4 per cent).

A similar analysis based on the Detroit First-Grade Intelligence Test was made, and the results are shown in Table 2. These data indicate that individual prognosis based on a six-year level of intelligence appeared to be more significant than a level of six and a half years. Figure 1 confirms this conclusion, since five of the six pupils in the mental-age zone of six to six and a half achieved satisfactory reading attainment. Consequently the present analysis utilizes this empirical level as a point of departure. The evidence in Table 2 indicates that, while pupils who have mental ages above six years are in a favorable position for group prediction of reading achievement (55 out of 66, or 83 per cent, of the cases falling in this category), nevertheless a mental age below six years on the Detroit First-Grade Intelligence Test does not entirely preclude the possibility of reading success. Four of the eleven pupils with mental ages below six made adequate reading grades and indicated potential instances where denial of opportunity might have resulted. While it is granted that, because of the small number of cases involved, the findings here do not possess statistical reliability, yet they have certain clinical value. A consideration of the scores made on the Metropolitan tests would have altered the prediction for two of these eleven pupils. It is particularly significant, furthermore, that a valid prediction of reading success could have been established for pupils falling below six years in mental age in nine out of eleven instances if the diagnosis of reading aptitude had been based jointly on the two prognostic tests.

Forty-nine of the group of 55 pupils (89 per cent) with mental ages above six years terminated the academic year with adequate reading

achievement. Association of the Metropolitan Readiness Tests with the Detroit First-Grade Intelligence Test did not increase the degree of predictability, for there were six adequate readers who scored below the critical level on the Metropolitan tests and four inadequate

TABLE 2

DISTRIBUTION OF PUPILS WITH MENTAL AGES BELOW AND ABOVE SIX ON DETROIT FIRST-GRADE INTELLIGENCE TEST ACCORDING TO READING ACHIEVEMENT AND ACCORDING TO SCORE ON METROPOLITAN READINESS TESTS

	Number of Pupils with Mental Ages	
	Below Six	Above Six
Total number of cases	11	55
Pupils with adequate reading achievement on Gates test:		
Scoring above 60 on Metropolitan tests	2	43
Scoring below 60 on Metropolitan tests	2	6
Total	4	49
Pupils with inadequate reading achievement on Gates test:		
Scoring above 60 on Metropolitan tests	0	4
Scoring below 60 on Metropolitan tests	7	2
Total	7	6

readers who scored above the critical level. In the category of pupils attaining inadequate reading achievement, a consideration of the scores on the Metropolitan tests again did not offer discrimination significant for predictive purposes.

The preceding analysis of the data might be treated summarily in the following tentative conclusions. Neither the Detroit First-Grade Intelligence Test nor the Metropolitan Readiness Tests, separately, nor even a selective combination of their measures, yielded evidence that exclusively would make it possible to predict ultimate individ-

ual attainment in first-grade reading. In general, however, scores above the commonly accepted critical levels on these prognostic tests tended to give selective status on a categorical basis. It appears that adequacy of individual prediction could be increased somewhat by utilizing a combination of the scores on the two tests. The latter consideration involves, however, the following discriminations. In

TABLE 3

DISTRIBUTION OF PUPILS WHO MADE INADEQUATE AND ADEQUATE READING ACHIEVEMENT ON GATES TEST ACCORDING TO LEVEL ATTAINED ON METROPOLITAN READINESS TESTS AND DETROIT FIRST-GRADE INTELLIGENCE TEST

	Number of Pupils	
	Making Inadequate Reading Achievement	Making Adequate Reading Achievement
Total number of cases	13	53
Pupils below critical levels on both Metropolitan and Detroit tests	7	2
Pupils above critical levels:		
On both tests	4	43
On one test	2	8

the case of pupils having mental ages of six years or over, the Metropolitan Readiness Tests appeared to offer no discriminatory advantages, but these tests appeared to aid the accuracy of prediction for pupils below six years mentally. Likewise, the Detroit test appears to aid in discriminating the reading prognosis for pupils falling below the critical level on the Metropolitan tests. The Detroit test does not appear, however, to further discrimination of pupils who score above 60 on the Metropolitan tests.

A somewhat different approach for analysis of the data in Figure 1 would be to consider the reading-prognosis tests in terms of joint scores for those pupils who achieved at least one grade of reading achievement and for those pupils who did not make this grade. This treatment gives the results shown in Table 3. It is obvious from this

tabulation that valid prognoses could have been obtained for 58 of the 66 pupils (88 per cent of the entire experimental population) if normal reading opportunities had been postponed for those pupils falling below the critical levels on both aptitude tests. A consideration of the factors influencing test unreliability and the complexity of conditions affecting adequate reading efficiency presents an excellent recommendation for utilizing the Detroit First-Grade Intelligence Test and the Metropolitan Readiness Tests as prognostic tests for reading aptitude, especially when expediency offers a limited basis for administrative judgment.

SUMMARY

Based on one year of reading achievement, as measured by the Gates Primary Reading Test, an attempt was made to validate the prognostic value of the Detroit First-Grade Intelligence Test and the Metropolitan Readiness Tests. These tests were given to all school children entering Grade I in Pullman, Washington, but findings have necessarily been restricted to those cases for whom complete records were available. The evidence indicates that critical utilization of these two tests in selective combination enhances their significance for prediction of first-grade achievement.

THE COMPLIMENTARY MARK

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THE NEED FOR THE MARK

THE lowest passing mark is reserved in some schools for those pupils who are unable to do the standard quality or quantity of work. It is a reward for effort rather than a measure of achievement. The pupil who receives the mark is presumably laboring under a handicap which, although he makes his best effort, prevents his doing standard work. Such a mark is sometimes called a "complimentary mark." It will be so designated in this article.

The complimentary mark is widely used. In a few schools it is an integral part of the marking system and is governed by adequate administrative regulations. In other schools, although it is given administrative sanction, it has little or no regulation. In still other schools teachers use it independently, however and whenever they please, without administrative sanction. The complimentary mark, of course, even in the schools where it is carefully regulated, is not the ideal solution for the problems presented by the subnormal or the underprivileged children. Many progressive schools are working toward widely differentiated curriculums and highly individualized instruction. Such integrating practices may be developed into the ultimate solution. In schools, however, where facilities are too limited to provide highly differentiated materials and methods of instruction and where a marking system is in use, the complimentary mark is a justifiable device and may be given a place in the schools' philosophies of education.

The use of the complimentary mark is a step toward democracy in education. A thoroughly democratic school adapts its work to the abilities and the needs of the children. It does not ask the children to conform to a common pattern. Few, if any, schools, however, are able at present to provide highly individualized instruction. Neces-

sary economies require that they set up standards of achievement adapted to the great middle group of abilities and that they offer instruction to bring the larger percentage of the pupils within the scope of these standards. The deviates at the lower end of the scale are unable to meet the standard requirements in quantity and quality of work. If the school is undemocratic, it will adhere rigidly to its standards and the less able pupil will be required to repeat the course or grade. In high school he may be permitted to try an alternate subject and to sacrifice credit in the subject which was not adapted to his abilities and needs. In the elementary school, where nearly all subjects belong to the common core, he has no choice but to repeat. He may repeat many times and still not reach the standard. In any event he becomes retarded. In some cases he becomes so discouraged with work ill adapted to his needs and with repeated failures that he drops out of school at the first opportunity. A school which cannot offer highly individualized instruction may, in the interests of democracy, employ the complimentary mark. The complimentary mark, if wisely used, protects the pupil against the deadening sense of repeated failures in subjects that are not adapted to his abilities and needs and gives him the opportunity to profit, insofar as he is capable, from the curricular and the extra-curriculum offerings of the school.

ADVANTAGES OF THE MARK

Teachers who use the complimentary mark state that it provides the benefits listed below. Some of these statements may appear at first to condone a pedagogically undesirable situation. If the situation created by the use of the complimentary mark, however, is contrasted with the situation which obtains without it, the former, if it be an evil, is seen to be the lesser of two evils.

1. It preserves in a pupil who cannot achieve the work of the curriculum a sense of self-confidence, self-respect, even of success.
2. It gives credit for effort.
3. It encourages continued effort even when achievement is slight.
4. It permits the school to promote to the next course or grade a pupil who, because of lack of opportunity, has not been able to do the work of a grade or a course but who will nevertheless be able to do the work of the next grade or course.

5. It permits the school to graduate some pupils who cannot meet all the academic requirements for graduation.

6. It retains pupils in school who, although they cannot succeed in some types of required work, are succeeding in other types of work.

7. It retains pupils of school age in school for the benefits that they derive from the socializing opportunities of the school.

8. It provides the opportunity to give pupils work commensurate with their abilities and needs even though it is not the standard work of the course or grade.

9. It saves teacher and pupil from too much make-up work after the pupil has been absent for illness or other necessary causes.

10. It gives teachers overburdened with work the opportunity to spend less time with slow pupils and more time with pupils who are doing standard work or better.

11. It distinguishes between pupils who have earned promotion and those who are promoted without having done the required work.

12. It enables teachers to set a relatively high standard for promotion without failing too many pupils, for those who cannot meet the high standards may be "passed" with a complimentary mark.

13. It saves the community the cost of unprofitable repetition of courses or grades.

DISADVANTAGES OF THE MARK

The chief objections to the complimentary mark seem to arise because the device is so often misused. The following criticisms are most commonly offered.

1. The use of the complimentary mark is not carefully regulated by an administrative plan. It is not a planned part of the marking system and of the general administration of the school.

2. Teachers and administrators in a school system lack a common understanding of the meaning of the mark and do not use it uniformly throughout the system.

3. Pupils, parents, college authorities, and employers, because they do not understand its meaning, are often disappointed in the low achievements of pupils who have been graduated from high school by use of the complimentary mark.

4. Teachers do not know to whom to give the mark because of the difficulty of determining ability, or the lack of it, to do standard work.

5. An indifferent but capable pupil may succeed in his desire to be known as a complimentary-mark pupil and so "get by" with little real effort.

6. Some teachers may use the mark with pupils of low intellectual ability as an excuse for not making an effort to teach a pupil all he can learn.

7. Teachers and administrators may become satisfied with the compli-

mentary mark and may not work toward the ultimate goal of providing curriculums suited to the needs and the abilities of all pupils.

8. A pupil may make satisfactory effort in a course or a grade and be promoted with a complimentary mark when he could have profited measurably by repeating.

9. The complimentary mark may be given too freely in prerequisite courses, as in high-school English, so that many pupils with low-grade preparation find their way into the upper levels of the subject. If they nearly outnumber the pupils with adequate preparation, the standards of the entire class may be lowered to accommodate them.

10. A pupil may become labeled a complimentary-mark pupil and be denied opportunity to attempt work that he might do well.

11. A dull but hard-working child may be embarrassed or discouraged by being classified as a complimentary-mark pupil with others of a less desirable type.

12. The progress that a dull child actually makes cannot be indicated if he always receives the complimentary mark.

13. The academic standards of the school may be lowered by using the complimentary mark.

PRECAUTIONS FOR USE OF THE MARK

In order that the abuses listed above may be avoided and that the complimentary mark may be made a valuable device in administering a more nearly democratic school system, certain precautions should be taken.

1. The use of the complimentary mark should be regulated by a carefully worked out administrative plan.

2. All teachers in the school should have a common understanding of the meaning of the mark and should use it according to that understanding.

3. Parents, pupils, college-admission offices, and prospective employers of pupils should understand the meaning of the mark. It should rarely, if ever, be used as a basis for recommendation for college entrance.

4. A case study should be made of each pupil who may be a complimentary-mark pupil to discover as fully as possible his aptitudes and needs. The case study should develop continuously as the pupil's reactions to various types of subject matter and instructional methods are discovered and recorded.

5. The complimentary mark should be used for a pupil only after a conference of teachers and supervisors has made a careful study of his case record. To receive the complimentary mark, the pupil should be judged by the conference to be doing the best work of which he is capable under the circumstances and to be incapable of profiting measurably by repetition. Particular care should be taken to identify pupils with the "get-by" attitude who want to conceal their abilities and to become branded as complimentary-mark pupils. Slow workers

should usually be given a mark of "incomplete" rather than the complimentary mark. The mark should be used sparingly in prerequisite subjects. Some handicaps which may entitle pupils to the complimentary mark are low general ability, inaptitude in specific subjects, inefficient mental habits, psycho-physical defects, an overload of work outside of school, poor scholastic background, nervous or emotional disturbances, poor physical health, and long absence from school.

6. The standard requirements for any course or grade should not be lowered for pupils who are capable of meeting them, even though there are a number of complimentary-mark pupils in the group.

7. The determination that a child is a complimentary-mark pupil in one course or grade or in one marking period should not necessarily hold for all courses or grades or for all marking periods. The teacher should aid the pupil in an effort to remove the handicaps and to do standard work.

8. Teachers and administrators should not consider the complimentary mark the ultimate solution but should strive continually to adapt the work to the aptitudes and the needs of each pupil.

CONCLUSION

The ultimate goal of a democratic school is the use of individual curriculums. The writer has commented on the individualization of curriculums in another connection.[1] As this goal is approached and as techniques are developed for teaching individuals effectively in class groups, the need for the complimentary mark will disappear. Then, indeed, the achievements of pupils in school cannot be compared by use of marks, for no single scale can be devised that will apply to all. Two symbols only will be required, one indicating that the pupil has made satisfactory progress in his curriculum and the other indicating that he has not.

[1] Cloy S. Hobson, "Evaluating the Curriculum for the Individual Pupil," *Appraising the Elementary-School Program*, pp. 323–30. Sixteenth Yearbook of the Department of Elementary School Principals. Bulletin of the Department of Elementary School Principals, Vol. XVI, No. 6. Washington: Department of Elementary School Principals of the National Education Association, 1937.

ENROLMENT TRENDS IN ELEMENTARY-SCHOOL GRADES, BY STATES

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IN AN earlier article[1] the writer sought, from an analysis of national enrolment data, to determine the extent to which population shifts, economic depression, and administrative grading and promotional policies may have accounted for trends in public-school enrolments at the elementary-school level during the period 1911–36. The earlier analysis showed that the effects of the economic depression and especially of administrative grading policies so obscured the total picture that it was almost impossible to determine the influence of population shifts alone. At the same time, there was clearly indicated the need for more detailed analysis in terms of state data from which to determine, if possible, what variations might exist between states. The present article constitutes an attempt to provide that analysis.

To present a comprehensive discussion of trends by grades in each state separately would, it is obvious, constitute an impossible task in a brief article and would be boring to the reader. It has been found convenient, therefore, to provide a kind of shorthand sketch which, in rough outline, should serve to indicate state enrolment trends at the elementary-school level for the period 1918–36.

The initial problem (and this contribution makes merely an attempt at a partial solution) was to express the essential facts in simple outline, sufficient for purposes of reconstruction in tabular and graphic form. If this end was to be achieved, it was necessary, first of all, to eliminate all unessential or misleading evidence. It was decided, therefore, to exclude from consideration all secondary-school data; all kindergarten and preschool data; and, because of their markedly eccentric behavior, all first-grade enrolments. This

[1] O. L. Harvey, "Enrolment Trends and Population Shifts," *Elementary School Journal*, XXXVIII (May, 1938), 655–62.

decision left for consideration only Grades II–VIII, inclusive, or in states in which the seven-four plan predominates, Grades II–VII, inclusive. Since, however, trends are not moving in the same direction nor at the same rate in all these grades, the next problem was to develop a simplified scheme for expressing trends within the grade limits selected. Almost any such scheme, it was evident, would be arbitrary, but some schemes would be more reasonable and more appropriate than others. An examination of the grade enrolment data charted for several states made it clear that trend lines for total enrolments would be grossly misleading because of trend variations among grades included in the total. On the other hand, to present more than two trend lines would complicate resolution of the final picture. It was therefore decided, after some experimentation with the data for several states, to limit comparison to two measures. These could represent either two separate single grades or the averages for two separate groups of grades. The latter procedure, using one curve to represent the average for Grades II–V and the other to represent the average for Grades VI–VIII (or VI–VII), was eventually selected. That this grouping of grades was purely arbitrary is not denied; any other grouping could have been used. It seemed, however, that the grouping chosen was convenient for the interpretation of current trends.[1]

Still a third problem remained. The computed averages necessarily would be expressed in the form of frequencies, which vary from one state to another according to the size of the enrolment. Thus, state comparisons would be useless unless the data were presented in graphic form on ratio paper. Furthermore, the trend lines thus developed maintain no constant relation with each other, and neither trend line is in itself stable. Some method would have to be developed to express the derived averages in comparable terms. The solution obviously lay, first, in expressing one of the trend lines (the "variable") in terms of its relation to the other (assumed to be "constant") and, second, in expressing the "constant" as an index relative to a base year common to all states.

[1] An impeccable method of expressing the trends of a complex of grades in simple and effective form would constitute an exceedingly valuable contribution in this field of statistics.

Thus, to express elementary-school enrolment trends in a given state at a given time and in such a way as to simplify comparison with those for any other state at the same or any other time, and to avoid the complexity which arises from a study of each of seven or more grades separately, it is sufficient for practical purposes to report merely two measures: the index for the average of Grades II–V and the percentage which the average of Grades VI–VIII constitutes of this index.

Appended are two tables and a chart.[1] Table 1 presents, for each state and, insofar as reported, for each biennium since 1918, the index for the average for Grades II–V. As base year it was found convenient to select 1926, the first in which a sufficiently large number of states reported enrolment data. Sufficient data were available for Colorado and Iowa to justify the estimating of an average for the base year, but unfortunately they were not available for Vermont, Rhode Island, and Connecticut, which are consequently omitted. The score for the base year, necessary for index computation, is presented for each state in the second column.

Because the maximum or "peak" index for each state is not always clearly determinable, an approximation has been made on the assumption of a smoothed curve. That this procedure is arbitrary is fully recognized. The peak indices thus determined are indicated in the table in boldface type. It will be noted that a peak index has been identified in forty-two states and that the year in which the peak index occurred is not the same for all states, even in the same region. The peak occurred in one state before 1922, in fifteen states before 1926, in twenty-seven before 1930, in thirty-seven before 1934, and in five during or after 1934.

Unfortunately age trends by states are not available after 1930, and those between 1920 and 1930 can only be estimated. Consequently, for the most important period of development, 1926–36, direct comparison of age and grade trends is not possible. Two methods of analysis are available, however, which might throw light on the problem. The first is a comparison of enrolment changes and age changes from 1920 to 1930, and the second is the reasonableness

[1] In all three the classification by regions conforms to that adopted by the National Resources Committee.

of the observation made above concerning the distribution of peak years—a measure, as it were, of internal consistency. Making estimates where possible to determine the average enrolments for Grades II–V for 1920 and comparing the percentage of the 1930 average to the 1920 average with the corresponding percentage for the age group of five to nine years, we obtain a rank-difference correlation coefficient of only $.04 \pm .11$. This coefficient suggests that for the period 1920–30 there was almost no relation between trends in enrolment averages for Grades II–V and the age group of five to nine.

Consideration of the evidence relating to enrolment trends for 1920–36, presented above, would tend to confirm this finding. If enrolment trends are closely related to shifts in the age structure of the population, a fairly high degree of regional consistency should appear in the incidence of peak years in average enrolments in Grades II–V. No such degree of consistency is observable. It is doubtful as a generalization, therefore, that the observed enrolment trends by states, especially the decline since the peak year in each state, is directly related to shifts in the age of the population.

Before this finding is finally accepted, however, it would be well to consult the visual evidence of trends in the averages for Grades II–V as presented in Figure 1, in which the states have been arranged by regions. There it will be observed that, although the peak year may vary from state to state, the general trend of the curve (the upper curve in each case) is somewhat similar for states in the same general region. Note, for example, the similarities between Washington and Oregon; Montana, the Dakotas, Idaho, Utah, and Colorado; Arizona and New Mexico; the Carolinas, Georgia, Alabama, and Mississippi; and a large number of states in the Northeast and the Middle regions. As will be pointed out later, there are really striking regional similarities in enrolment trends—an observation forcing reconsideration of the earlier tentative conclusion.

An explanation of the apparent discrepancy in the findings is necessary. The only explanation which, in the writer's opinion, might serve the purpose is that advanced in his earlier article dealing with the national picture, namely, that the relation between age

TABLE 1

PERCENTAGES THAT AVERAGE ENROLMENTS FOR GRADES II–V IN 1918–36 ARE OF ENROLMENT IN 1926 AS BASE YEAR*

State	Index Base Score (Enrolment in Thousands)	1918	1920	1922	1924	1926	1928	1930	1932	1934	1936
Far West:											
California	83.9	67	71	83	98	100	105	112	117	113	111
Nevada	1.6	....	100	94	106	100	100	106	112	112	112
Oregon	17.5	88	85	96	102	100	100	105	107	100	90
Washington	31.8	90	97	97	102	100	**100**	102	96	91	88
Northwest:											
Idaho	12.2	....	....	**106**	104	100	101	97	92	90	90
Utah	13.4	100	94	102	**103**	100	100	99	98	96	92
Colorado	(25.0)†	....	....	....	....	**100**	....	98	97	90	88
Wyoming	5.0	....	102	....	**110**	100	106	108	108	104	102
Montana	12.1	88	**115**	106	104	100	99	98	92	86	81
North Dakota	18.7	97	102	....	**102**	100	96	91	87	83	80
South Dakota	17.0	....	96	101	**102**	100	98	97	95	85	84
Nebraska	30.7	....	....	....	....	100	**102**	100	98	93	87
Kansas	41.7	....	61	63	....	100	**99**	100	97	94	88
Middle:											
Missouri	92.8	....	....	....	....	**100**	....	....	....	78	76
Iowa	(55.0)†	....	....	....	**105**	100	....	95	93	89	84
Minnesota	54.4	....	86	**102**	99	100	99	98	96	91	87
Wisconsin	49.1	96	95	99	102	100	106	**108**	101	96	94
Michigan	83.8	....	82	83	97	100	94	**109**	108	102	97
Illinois	130.1	91	89	92	....	100	**100**	99	97	94	87
Indiana	64.2	101	96	99	102	100	100	101	102	98	98
Ohio	123.6	92	....	....	100	100	**104**	100	101	97	94
Northeast:											
Pennsylvania	210.1	....	....	....	....	**100**	100	99	96	92	88
New York	197.6	....	....	95	100	100	103	105	**109**	101	97
Maine	14.2	86	98	....	102	100	104	105	**110**	107	105
New Hampshire	7.3	....	95	96	99	100	**100**	100	99	96	95
Vermont‡	....	....	....	....	....	....	....	....	....	....	....
Massachusetts	68.6	88	88	95	100	100	105	**105**	103	100	94
Rhode Island‡	....	....	....	....	....	....	....	....	....	....	....
Connecticut‡	....	....	....	....	....	....	....	....	....	....	....
New Jersey	73.5	....	83	85	92	100	108	**109**	107	101	93
Delaware	4.5	....	102	102	100	**100**	100	102	98	98	96
Maryland	29.8	101	....	92	101	100	105	107	107	107	**108**
West Virginia	45.5	86	91	100	**110**	100	100	97	103	100	104

* Figures in boldface type represent the estimated maximum or "peak" index on an assumed smooth curve.

† Parentheses indicate estimates.

‡ Sufficient data were not available in these states to justify estimates for the base year. Consequently indices for subsequent years on the base of 1926 cannot be computed.

TABLE 1—*Continued*

State	Index Base Score (Enrolment in Thousands)	1918	1920	1922	1924	1926	1928	1930	1932	1934	1936
Southeast:											
Kentucky	67.0	102	97	112	102	100	94	94	101	97	100
Tennessee	76.3	94	97	99	103	100	100	90	91	92	91
Virginia	67.8	....	....	100	102	100	99	99	104	101	100
North Carolina	100.0	84	....	....	103	100	99	102	100	103	100
South Carolina	60.0	....	70	96	99	100	97	95	96	93	96
Florida	38.9	60	68	72	80	100	100	96	101	106	107
Georgia	85.4	107	107	112	114	100	98	98	102	104	103
Alabama	67.6	....	104	108	106	100	104	104	106	106	109
Mississippi	64.7	....	....	....	....	100	103	102	97	98	....
Louisiana	44.2	....	....	....	110	100	113	114	116	117	121
Arkansas	61.7	....	....	114	101	100	93	84	82	82	82
Southwest:											
Oklahoma	70.7	....	95	103	102	100	103	101	99	88	92
Texas	137.1	91	91	104	102	100	97	104	104	104	104
New Mexico	11.4	....	115	115	115	100	96	89	95	83	90
Arizona	8.4	....	107	91	102	100	106	124	114	108	117
Median	.....	91	95	99	102	100	100	100	101	97	94

and enrolment trends is obscured by the effects of other factors, such as improvements in the grading and the promotion of children in the earlier grades and population migration, especially significant in the Northwest and in parts of the Southeast regions. That a relation actually exists between age and enrolment trends, which probably will become more and more evident in the near future (as is already suggested from evidence relating to some of the older industrial states, such as Massachusetts), is not, however, denied.

The findings in Table 2, in which the enrolment averages for Grades VI–VIII (or Grades VI–VII) are recorded as percentages of the averages for Grades II–V, are less contentious and may be briefly expressed as follows:

Before 1934, although in all states the percentages had consistently increased, no percentage had exceeded 100. By 1934, however, seven states, and by 1936 fifteen states, had reached or exceeded the percentage of 100. The significance of this observation is important. It means that enrolments in the earlier elementary grades of these

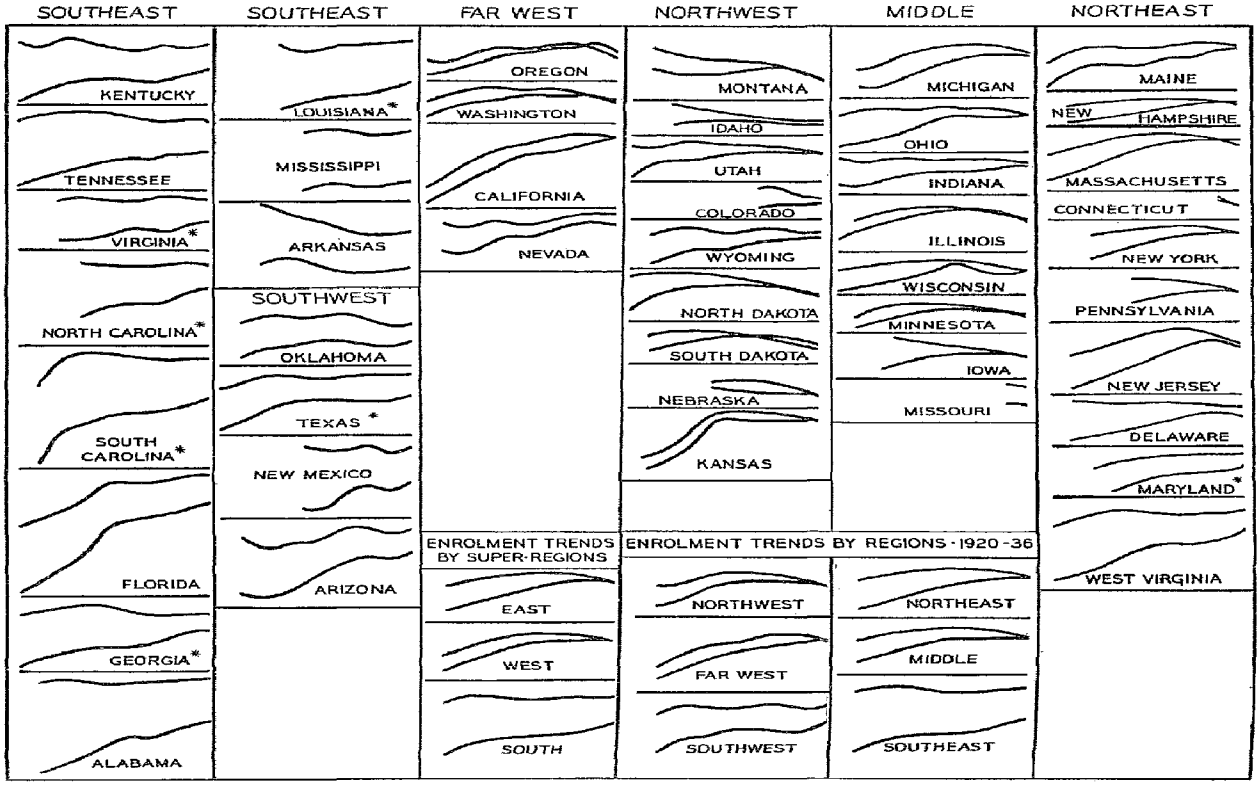

FIG. 1.—Enrolment trends in 1918–36 by states and regions. All curves are comparable in terms of growth. The upper curves represent the averages of Grades II–V; the lower curves, Grades VI–VIII (or Grades VI–VII in states marked with asterisks, which have the seven-four plan). No reports were available for Rhode Island and Vermont.

states are becoming actually less than those in the later grades.[1] The last row in Table 2, showing the median percentage of the states reporting in any year, clearly indicates the rapidity with which this shift is taking place. From 70 in 1918 the median rose to 82 in 1926, to 86 in 1930, and to 96 in 1936.

In general, the northern states have reached higher percentages than have the southern states. The probable reasons for the percentage scores vary somewhat according to geographical location of the states. For example, examination of the percentages for 1936 shows that, of the fourteen states scoring 100 or more, six are in the Far West or the Northwest regions and these six have been losing enrolments in the earlier grades for many years (see Table 1); the remainder, all in the Middle and the Northeast regions, reached the peak in enrolment in Grades II–V at later dates and are declining in enrolments in the earlier grades at a slower rate. Thus, regional differences undoubtedly affect the relation between enrolments in the earlier and the later elementary-school grades. Most conspicuous in this connection is the evidence relating to the southern states, where by 1936 only two out of fifteen states had exceeded a percentage of 80.

Generally speaking, the size of any percentage reported in this table is a rough measure of the holding power of the elementary schools; the smaller the percentage, the poorer the holding power. The deficiencies of the southern states in this connection are especially noticeable. In part, the low percentages in these states are due to an increase in enrolments in the earlier grades; but the relative increase in enrolments in the later grades still fails to increase the percentage to any appreciable extent. Progress in the Southwest region is undoubtedly greater than that in the Southeast, but the Southwest also has a long way to go before reaching the high percentages common to the northern states.

In Figure 1 an attempt has been made to present graphically the information contained in Tables 1 and 2. As a means of facilitating direct comparison between states, the computed averages have been plotted on ratio paper, as this arrangement has the effect of present-

[1] By way of illustration, in Massachusetts for 1936 the ranking of grades by size of enrolments is as follows: VII, VI, I, V, VIII, IV, II, III. The grades are almost in reverse order of what one would expect.

TABLE 2

PERCENTAGES THAT AVERAGE ENROLMENTS OF GRADES VI–VIII ARE OF AVERAGE ENROLMENTS OF GRADES II–V IN 1918–36

State	1918	1920	1922	1924	1926	1928	1930	1932	1934	1936
Far West:										
California	81	85	85	79	88	88	85	86	94	99
Nevada	.....	75	73	76	88	88	88	89	89	89
Oregon	86	93	89	88	97	97	98	97	107	108
Washington	83	86	88	86	92	95	92	98	102	104
Northwest:										
Idaho	.....	.....	82	86	91	89	93	96	99	97
Utah	71	87	82	81	89	90	95	94	96	98
Colorado	.....	.....	.....	.....	.....	.....	80	82	91	94
Wyoming	.....	73	.....	80	84	85	87	87	94	96
Montana	78	79	81	84	87	90	94	99	103	101
North Dakota	66	76	.....	84	89	93	97	99	100	98
South Dakota	.....	85	87	90	95	96	96	98	110	101
Nebraska	.....	.....	.....	.....	95	89	90	92	96	100
Kansas	.....	88	88	.....	91	93	90	92	97	101
Middle:										
Missouri	.....	.....	.....	.....	43	.....	.....	.....	82	83
Iowa	.....	.....	.....	75	.....	.....	92	93	99	101
Minnesota	.....	89	81	85	89	94	95	96	101	103
Wisconsin	76	80	82	82	89	92	94	91	92	100
Michigan	.....	83	81	75	82	88	85	87	93	96
Illinois	78	89	86	.....	91	92	90	94	99	101
Indiana	74	70	83	82	87	88	86	87	95	96
Ohio	70	.....	.....	77	83	89	90	89	95	99
Northeast:										
Pennsylvania	.....	.....	.....	.....	78	84	86	90	97	100
New York	.....	.....	78	78	84	88	89	91	96	99
Maine	79	82	.....	80	84	85	87	81	94	97
New Hampshire	.....	83	84	82	85	88	92	94	103	103
Vermont†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Massachusetts	72	77	79	78	84	89	91	93	99	104
Rhode Island†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Connecticut†	68	.....	.....	.....	.....	.....	.....	.....	97	100
New Jersey	.....	67	72	70	73	77	80	88	96	96
Delaware	.....	65	70	71	78	78	83	91	93	91
Maryland*	55	.....	48	71	79	81	79	82	84	87
West Virginia	55	54	55	56	66	72	72	70	75	80
Southeast:										
Kentucky	56	58	61	62	69	73	71	69	63	75
Tennessee	48	51	53	54	58	61	65	67	68	71
Virginia*	.....	.....	64	61	67	75	69	67	74	78
North Carolina*	51	.....	.....	55	62	65	64	66	72	76
South Carolina*	.....	41	44	44	48	52	54	56	60	63

* In a state marked with an asterisk the averages are for Grades VI–VII only because most of the state operates on the seven-four plan.

† Sufficient data were not available in these states to justify estimates for the base year. Consequently indices for subsequent years on the 1926 base cannot be computed.

TABLE 2—*Continued*

State	1918	1920	1922	1924	1926	1928	1930	1932	1934	1936
Southeast—*continued:*										
Florida	48	48	55	55	60	64	69	67	70	73
Georgia*	45	47	48	48	56	59	59	61	65	66
Alabama	.....	54	57	63	51	54	53	56	60	60
Mississippi	.....	.....	.....	.....	52	55	54	57	57	.....
Louisiana*	.....	.....	.....	51	60	56	58	58	58	67
Arkansas	.....	.....	51	63	59	62	63	66	66	68
Southwest:										
Oklahoma	.....	67	69	71	76	76	74	76	81	83
Texas*	61	66	72	73	79	80	75	74	77	96
New Mexico	.....	.....	.....	.....	46	46	63	63	66	67
Arizona	.....	53	58	57	65	70	65	74	77	77
Median	70	76	76	75	82	85	86	87	94	96

ing rate of growth as distinct from absolute change. So far as possible, states have been placed in juxtaposition in accordance with geographical location and region. Summarized data by regions and again by super-regions (combining Far West with Northwest, Middle with Northeast, and Southwest with Southeast) are presented in the insets. Especially in view of the preceding discussion of the tabular evidence, the story which these charts tell is sufficiently clear to make further elaboration unnecessary. Most interesting, perhaps, are the observations which might be made concerning the marked difference between northern and southern states, and the peculiar deviations of individual states from the composite of the region in which they occur. In the latter connection, attention is drawn to the following states: Nevada, which is more like the Southwest average than like that of the other Far West states; Iowa, which in some respects more closely approximates the Northwest average than the average for the Middle States; and Maryland and West Virginia, which resemble the average for the Southeast.

The charts may be classified according to two major types, an understanding of which is useful as an aid in predicting future trends. Whether the trends during earlier years declined, rose, or remained firm makes no difference, excepting perhaps to provide a not very significant subclassification of each of the major types. The important differentiating characteristic is the crossing-over of the two trend lines. Type X, in which the trend lines cross, is illustrated by

South Dakota and Massachusetts; Type H, in which the trend lines have not crossed, is illustrated by New Jersey and Oklahoma. One may confidently predict for Type X that, as population-age structure and promotional policies stabilize, the curve for Grades II–V (the "constant" curve) will once more cross the curve for Grades VI–VIII (the "variable" curve) and, regardless of subsequent reversals, eventually remain in position above it. Prediction relative to Type H is less certain. Where a marked downward trend in both curves has already begun, it is doubtful that the curves will ever cross; but where, regardless of the behavior of the "constant" curve, the "variable" curve is still rising—as in Georgia—there is some likelihood that the curves will eventually cross. Much depends on the imminence of influences resulting from changes in the age composition of the population. If these are delayed or are obscured by the influences of other factors, the curves are likely to follow the pattern of Type H; otherwise they may be expected to reverse positions for a while, as in the pattern of Type X.

This treatment of the subject of state enrolment trends has been, as was predicted, exceedingly sketchy. Each state could be given a comprehensive article in itself. The purposes here have been (1) to indicate some possibilities in the methods and techniques of approach to analysis of the problem and (2) to attempt to evaluate broadly some of the evidence on the relation between enrolment trends and population trends. As regards the first, suggestion has been made, for purposes of direct comparison of states, of a technical device for the simplified representation of elementary-school enrolment trends. As regards the latter, the data have confirmed, though by no means convincingly, the tentative conclusion of the writer's earlier study: for the present, enrolment trends are so obscured by other major variables, such as, possibly, improvements in grading and promotional policies and population migrations resulting from economic depressions, that any attempt to infer a direct relation between population-age trends and elementary-school enrolment trends would constitute an unwarrantably particularized deduction.

The need for further research into the effects of urban-rural and negro-white differences and for a thorough analysis of trends in enrolments for Grade I is even more strongly evident now than it was in the preceding article.

SELECTED REFERENCES ON ELEMENTARY-SCHOOL INSTRUCTION

III. The Subject Fields—Continued

*

This list of references is the third of the annual series relating to instruction at the elementary-school level. The first list contains items on the curriculum, methods of teaching and study, and supervision. The second list contains items grouped under the following subject fields: reading, English, spelling, handwriting, the social sciences, and geography. The present list covers the remaining subject fields at the elementary-school level and is the last of the series of three dealing with elementary-school instruction.

ARITHMETIC[1]

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The following references were selected from a total of sixty-one articles or books published from July, 1937, to June, 1938. They contain both critical and research materials. The proportion of new research this year seems smaller than in any year since 1925, when the writer prepared his first bibliography on arithmetic.

556. Baxter, Bernice. "Trends in Placement of Topics in Arithmetic," *California Journal of Elementary Education*, VI (May, 1938), 227–35.

An application of the findings of research to problems of grade placement.

557. Brownell, William A. "Readiness and the Arithmetic Curriculum," *Elementary School Journal*, XXXVIII (January, 1938), 344–54.

A critical appraisal of the evidence on readiness. Contains a bibliography of thirty-four references.

558. Brownell, William A. "A Critique of the Committee of Seven's Investigations on the Grade Placement of Arithmetic Topics," *Elementary School Journal*, XXXVIII (March, 1938), 495–508.

A penetrating criticism of grade-placement studies. Contains a good bibliography.

[1] See also Items 178 (Polkinghorne) and 181 (Sueltz) in the list of selected references appearing in the April, 1938, number of the *Elementary School Journal*.

559. BROWNELL, WILLIAM A. "Two Kinds of Learning in Arithmetic," *Journal of Educational Research*, XXXI (May, 1938), 656–64.

A critical article showing the implications for arithmetic of two theories of learning: (1) by "repetition" and (2) by "insight."

560. BRUECKNER, LEO J., with the co-operation of G. T. BUSWELL, FREDERICK B. KNIGHT, GUY M. WILSON, and CLIFFORD WOODY. "Special Methods and Psychology of the Elementary-School Subjects: Arithmetic," *Review of Educational Research*, VII (December, 1937), 453–63, 545–47.

A review of research in arithmetic from July, 1934, to July, 1937. Supplemented by a bibliography of fifty titles.

561. BUCKINGHAM, B. R. "Significance, Meaning, Insight—These Three," *Mathematics Teacher*, XXXI (January, 1938), 24–30.

A critical evaluation of the implications of modern psychology for the teaching of arithmetic.

562. BUSWELL, G. T. "Deferred Arithmetic," *Mathematics Teacher*, XXXI (May, 1938), 195–200.

A critical discussion of proposals to postpone arithmetic.

563. GORMAN, FRANK H. "The Arithmetic Vocabulary of the Elementary-School Teacher," *Elementary School Journal*, XXXVIII (January, 1938), 373–79.

Reports a comparison of the technical vocabularies in arithmetic of elementary-school teachers and students of elementary education.

564. GROSSNICKLE, FOSTER E. "Appraising the Program for Teaching Division," *Appraising the Elementary-School Program*, pp. 361–68. Sixteenth Yearbook of the Department of Elementary School Principals. Bulletin of the Department of Elementary School Principals, Vol. XVI, No. 6. Washington: Department of Elementary School Principals of the National Education Association, 1937.

A useful interpretation of the present state of knowledge relating to the teaching of division.

565. GROSSNICKLE, FOSTER E. "The Effectiveness of Checking Subtraction by Addition," *Elementary School Journal*, XXXVIII (February, 1938), 436–41.

Reports an experiment with seven groups of third-grade children. Finds checking under certain conditions not useful.

566. KENWRICK, EVELYN E. *Number in the Nursery and Infant School*. London, England: Kegan Paul, Trench, Trubner & Co., Ltd., 1937. Pp. xii+252.

An interesting treatment by an English writer of the theory and the content of pre-primary arithmetic. Contains much concrete material.

567. MORTON, ROBERT LEE. *Teaching Arithmetic in the Elementary School:* Vol.

I, Primary Grades, pp. x+410; Vol. II, Intermediate Grades, pp. xii+538. New York: Silver Burdett Co., 1937 and 1938.

A comprehensive and an intelligent treatment of the subject. An outstanding publication.

568. SCHONELL, FRED J. *Diagnosis of Individual Difficulties in Arithmetic.* Edinburgh, Scotland: Oliver & Boyd, Ltd., [1937]. Pp. xii+116.

An elaborate diagnostic study based on tests constructed by the author. Provides detailed techniques of diagnosis. A valuable contribution from abroad.

569. SHOUSE, J. B. "The Difficulty of the Concrete," *School Science and Mathematics*, XXXVII (November, 1937), 937–45.

A discussion of the meaning of concrete and abstract in arithmetic.

570. SMITH, HENRY LESTER, and EATON, MERRILL T. "An Analysis of Efficiency in Addition," *Twenty-fourth Annual Conference on Educational Measurements*, pp. 52–78. Bulletin of the School of Education, Indiana University, Vol. XIII, No. 4. Bloomington, Indiana: School of Education, Indiana University, 1937.

Reports an investigation with college students, using different conditions of drill in addition. Contains tables, graphs, and a bibliography.

571. THIELE, C. L. "An Incidental or an Organized Program of Number Teaching?" *Mathematics Teacher*, XXXI (February, 1938), 63–67.

A critical discussion of the problem.

572. WHEAT, HARRY GROVE. *The Psychology and Teaching of Arithmetic.* Boston: D. C. Heath & Co., 1937. Pp. x+592.

A comprehensive treatment of the subject, covering all levels of the elementary school.

573. WOODY, CLIFFORD. "Arithmetic," *What Does Research Say?* pp. 56–68. Bulletin No. 308. Lansing, Michigan: State Department of Public Instruction, 1937.

A very useful article for teachers. Gives an answer to sixteen specific questions in the light of present research findings.

574. WOODY, CLIFFORD. "A General Educator Looks at Arithmetic Readiness," *Mathematics Teacher*, XXX (November, 1937), 314–21.

A good critical discussion. Considers the problem of readiness at all levels.

SCIENCE

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This bibliography on science in the elementary school includes articles, brochures, research studies, and books published during the interval of June, 1937, to June, 1938.

575. ADAMS, AGNES L. (Compiler). *Sharing Experiences through School Assemblies*. Washington: Association for Childhood Education, 1938. Pp. 40.

A compilation of materials dealing with school assemblies. It is sprinkled through with suggestions on how science may be used in this work.

576. BEAUCHAMP, WILBUR L., BLOUGH, GLENN O., and MELROSE, MARY. *Discovering Our World:* Book I, pp. 288; Book II, pp. 252. Chicago: Scott, Foresman & Co., 1937 and 1938.

The first and second books in a series of "basic studies in science" for the middle grades.

577. BLOUGH, GLENN O. "Studying Trees," *Instructor*, XLVII (March, 1938), 49–58.

An illustrated unit giving an overview and suggested procedures for teaching. The subject is developed separately for the primary, the middle, and the upper grades.

578. BLOUGH, GLENN O. "They Can't Read," *School Science and Mathematics*, XXXVIII (June, 1938), 627–32.

A discussion of a problem facing most teachers of science in Grades V–VII, inclusive.

579. CROXTON, W. C., and OTHERS. "Functional Outcomes of Science Teaching in the Elementary School," *NCES News Notes*, IV (November, 1937), 189–92. Salem, Massachusetts: National Council on Elementary Science (305 Lafayette Street).

A discussion of functional versus informational outcomes and a listing of such outcomes in terms of children's activities in their everyday living.

580. DUNCAN, CARL D. "Insects as Enemies and Benefactors of Mankind," *Science Guide for Elementary Schools*, IV (October, 1937), 1–85. Sacramento, California: State Department of Education.

This issue of the instructive and popular science guide for teachers discusses insects in terms of their place in the living world, their food and feeding habits, their place as food for other animals, their relation to flowers, their commercial importance, their relation to the soil and to decay, methods of controlling them, etc. Helpful suggestions to teachers are included.

581. DUNN, FANNIE W. "Natural Sciences in the Modern Rural School," *Newer Types of Instruction in Small Rural Schools*, pp. 73–86. Yearbook of the Department of Rural Education. Washington: Department of Rural Education of the National Education Association, 1938.

A specialist in rural education discusses the place and the functions of science in the small rural school.

582. EBEL, ROBERT L. "What Is the Scientific Attitude?" *Science Education*, XXII (January and February, 1938), 1–5, 75–81.

A critical discussion of what constitutes the scientific attitude. One of the best brief treatments of this difficult subject that the reviewer has seen. The February issue contains a list of the elements of the scientific attitude and the means by which they were derived. While this article does not specifically deal with elementary science, it has been included in this list of selected references because of its significance to those engaged in teaching the subject.

583. GORDON, ROBERT B. "An Outdoors School for the Elementary Science Teacher," *School Science and Mathematics*, XXXVIII (January, 1938), 67–71.

Lists and discusses the advantages of the outdoor school in the preparation of teachers of science in the elementary school. Its advantage over formal instruction in the colleges is that it is (1) a place to learn informal methods of presenting the facts of elementary science, (2) a place to acquire firsthand experience with biological materials, and (3) a place for healthful recreation and experience.

584. GRAVES, GEORGE W. "Soil, Its Use and Conservation," *Science Guide for Elementary Schools*, IV (September, 1937), 1–54. Sacramento, California: State Department of Education.

One of the best treatments for teachers of the subject. Stresses the social and the economic implications in soil conservation.

585. HANSEN, VIOLET. "Sky Study," *Grade Teacher*, LV (January, 1938), 12–13, 64–65.

A unit drawn from the field of astronomy. Considers the earth and other planets; sun, moon, and stars; and stories of the constellations. Well illustrated and helpful in children's activities.

586. HEFFERNAN, HELEN. "Science in the Professional Education of Teachers for the Elementary School," *California Journal of Elementary Education*, VI (November, 1937), 100–104.

"Intelligent participation in our culture is predicated upon an understanding of its scientific bases. The lag between scientific advancement and social adjustment can be decreased only as understanding develops concerning the need for the application of a dynamic social theory to the institutions of social life. Human welfare can be guaranteed only as the products of scientific and technological development become more widely accessible and more generously shared by all the people." This statement sets the theme for the author's program of science in the education of teachers. One of the best articles of the year.

587. HULTZ, HELEN LORRAINE. "An Activity: When Leaves Come Out," *Science Education*, XXII (March, 1938), 123–28.

An account of an activity with a class of children in the lower elementary school. Contains a day-by-day record of the children's experiences in answering questions from observation. Replete with simple experiments, suggestions for exhibits, and suggestions for the keeping of scientific records and data.

588. JOHNSON, EMMA C. "Science in an Intermediate Classroom," *School Science and Mathematics*, XXXVII (December, 1937), 1042–44.

An interesting account of the science activities in Grade V of the Loring School in Minneapolis. Shows how the teacher and the children used the nearby natural environment for study of plant and animal relationships, as well as a source of supply for biological materials to bring to the classroom.

589. LUPONE, O. J. "Some Problems That Must Be Answered in Elementary Science," *School Science and Mathematics*, XXXVIII (June, 1938), 666–72.

A discussion of some vital problems that confront the classroom teacher who is beginning to introduce science into the program. The problems discussed center in the conception of learning, grade placement of content, the use of textbooks, choice of equipment, and testing and evaluation of results.

590. MELROY, RUTH M. "Science—An Absorbing Interest," *Childhood Education*, XIV (December, 1937), 176–77.

A description of the course of study in science for the primary grades in the District of Columbia.

591. PERSING, ELLIS C. "Science Materials and Equipment for the Elementary-School Program," *Science Education*, XXI (October, 1937), 136–40.

A presentation of the need for more experimentation in science for the elementary school, followed by a list of apparatus that may be constructed or purchased. This list will prove especially helpful to teachers initiating a science laboratory in their classrooms.

592. Round Robin Series: *Electricity Comes to Us* by Rose Wyler and Warren W. McSpadden; *Oil Comes to Us* by Rose Wyler and Warren W. McSpadden; *Steel* by Marguerite Schwarzman. New York: Grosset & Dunlap, 1937. Pp. 30 each.

A series of attractively illustrated booklets for the upper grades, telling in an easily understood way the story of the topic indicated by the book title.

593. SHARPE, PHILIP B. "Elementary Science Teaching," *School Science and Mathematics*, XXXVIII (February, 1938), 120–25.

A high-school teacher of science explains to classroom teachers in the elementary school the three historical stages in the development of the scientific method and shows how each of these stages may be used in attacking problems that face children. While this reviewer is in thorough agreement with the author's plea for the fullest use of the scientific method as a means for the solution of problems, he feels that the author, in his enthusiasm (and possibly lack of experience with young children), has gone too far by recommending an absolute minimum use of reference materials. A judicious use of reference materials does not necessarily defeat the method of science; indeed, it is one means of attaining it.

594. STEVENS, BERTHA. "First Years in Science—What Are the Goals?" *School Science and Mathematics*, XXXVIII (January, 1938), 36–40.

For the kindergarten and the first three grades the author would promote as goals: (1) the concept of nature as one whole; (2) direct, actual, tangible experience with the natural environment; and (3) experience with nature and science that involves the child's emotions, intellect, imagination, and initiative. The author shows how these goals may have a measure of realization through the study of the earth in relation to other members of the universe.

595. "Teachers' Number," *Cornell Rural School Leaflet*, XXXI (September, 1937), 3–64.

This issue of the leaflet features supplementary material for use with the New York State course of study in elementary science.

596. WEBB, HANOR A. "Our Thousand and Two Childish Questions," *School Science and Mathematics*, XXXVIII (May, 1938), 504–10.

An analysis of types of questions asked by children from nearly every state in the Union which were gathered by the author through his "Lost Jewel" column in *Current Science*, a weekly classroom paper. The author believes that the unduly large number of questions asking who was the first to invent such and such a thing or when was a certain article first made and used, is a result of the fetish made in teaching names and dates of discovery. He says: "From our teaching, from our textbooks, reference books, and other science literature of today, our youngsters have received the idea of invention as a sort of catastrophe similar to creation, rather than a process which is definitely evolution."

597. WYLER, ROSE. *The World Is Round*. Milwaukee, Wisconsin: E. M. Hale & Co., 1937. Pp. 48.

The first booklet on science to be issued in the popular Picture Scripts. Simple, accurately worded, and well-illustrated science material based on children's interests and experiences. For seven- and eight-year-old children. It is to be hoped that more inexpensive materials of this type will soon be available.

598. WYLIE, C. C. *Our Starland*. Chicago: Lyons & Carnahan, 1938. Pp. 378.

An attractive and accurate book on astronomy for the better readers in Grades V and VI. Written by an astronomer, this book presents some material new to the elementary school. The explanation of seasonal change (always a difficult topic to teach, largely because teachers themselves do not have a clear concept of it) is particularly excellent.

MUSIC[1]

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599. ANNETT, THOMAS. *Music in the Rural School*. Boston: Boston Music Co., 1938. Pp. 124.

A brief treatise on the course of study, its organization and administration, and methods of teaching in various phases of music, such as vocal, instrumental,

[1] See also Items 263 (McEachern), 264 (Mursell), 266 (Pitts and Gray), and 269 (Wilkinson) in the list of selected references appearing in the March, 1938, number of the *School Review*.

appreciation, and creative. A bibliography of materials is included. Although written primarily for the teacher in the rural school, the book will be helpful also to instructors in urban systems.

600. BIRGE, EDWARD BAILEY. *History of Public School Music in the United States*. Boston: Oliver Ditson Co., 1937 (revised). Pp. 310.

A revised edition of the book first published in 1928. The new material treats briefly recent events, innovations, and trends and brings the book up to date.

601. BLIND, E. E. "An Experiment with Monotones," *Music Educators Journal*, XXIV (March, 1938), 37–39.

Gives procedures and results of an experiment in teaching problem singers, or so-called "monotones," how to "carry a tune." The author states that the results were successful.

602. DOIG, DOROTHEA. "Can Everyone Use Music Tests?" *Music Educators Journal*, XXIV (February, 1938), 29, 32.

The writer of the article thinks that much of the criticism leveled against music tests is due to lack of understanding and information. She urges that, before giving the tests, teachers be adequately prepared to administer them and to interpret the results.

603. FULLERTON, C. A. "Reasons for Radical Changes in School Music," *Midland Schools*, LII (January, 1938), 159–61.

An article based on the experiences and the research of the author. He points out fallacies of many of the traditional theories and practices in music-teaching, particularly in the field of reading, and suggests ways for improvement.

604. GIDDINGS, THADDEUS. "The Good Old Do-Re-Mi," *Music Educators Journal*, XXIV (December, 1937), 32, 34.

An advocate of the sol-fa syllables gives his reasons for using them in teaching music-reading in the schools.

605. HENDRICKSON, GORDON. "Needed Research in Music Education," *Journal of Educational Research*, XXXI (May, 1938), 672–77.

Discusses phases of music-teaching in which research is needed if the effectiveness of the work is to increase.

606. MURRAY, JOSEPHINE, and BATHURST, EFFIE G. *Creative Ways for Children's Programs*. New York: Silver Burdett Co., 1938. Pp. xiv+396.

Gives materials and directions for programs of different types, in which music plays an important role. Chapters treat the creative program and the socialized school, the occasions of programs, creativeness in the major activities of programs, costumes, stage properties, rehearsals, whole-school participation in programs, etc. A selective, annotated bibliography is appended.

607. MURSELL, JAMES L., and GLENN, MABELLE. *The Psychology of School Music Teaching*. New York: Silver Burdett Co., 1938 (revised). Pp. vi+386.

A revised edition of the book originally published in 1931. The bibliographies at the close of chapters and the chapter on tests in music have been extended to include recent studies. A section on giving marks in music has been added.

608. OTTERSTEIN, ADOLPH W., JR. "Music in the Activity Program," *Music Educators Journal*, XXIV (February, 1938), 25, 27.

A report of an integrative plan used in Grades V and VI of a school in San Jose. Gives objectives of the activity, materials, approaches, and results.

609. PERHAM, BEATRICE. *Music in the New School.* Chicago: Niel A. Kjos Music Co., 1937. Pp. x+148.

An account of the music activities developed and carried on by the author in the University School at Ohio State University. Gives philosophy and underlying principles of the program and describes materials, procedures, and results.

610. RICH, FRANK M. "Moral Education with Simple Musical Instruments," *Educational Method*, XVII (December, 1937), 107–13.

An account of how simple instruments, such as fifes, harmonicas, and ukeleles, may be used to develop right attitudes among the players, as well as musical skill and interest.

ART

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611. *Art Education Today.* Sponsored by Members of the Fine Arts Staff of Teachers College, Columbia University. New York: Teachers College, Columbia University, 1938. Pp. 134.

An annual publication devoted to problems of art education. Contains discussions of the following topics having special application to the elementary school: "New Directions for Art," "The Meaning of Art in Education," "Modern Art and Social Problems," "A Way of Teaching Art," "The Art Teacher's Place in the Curriculum," and "Art as an Approach to Children's Emotional Problems."

612. BIRREN, FABER. *The Wonderful Wonders of Red-Yellow-Blue.* New York: McFarlane, Warde, McFarlane, Inc., 1937. Pp. 48.

An attractively illustrated book (mostly marginal designs in color) with many interesting facts about color. Intended to introduce children to the world of color.

613. BURLEIGH, BERTHA BENNET. *Circus.* New York: G. P. Putnam's Sons, 1938. Pp. 128.

A picture-book with text. The circus in all its infinite variations is presented through pen sketches. The profuse illustrative material should be helpful to teachers in developing the drawing of animals and figures and in planning the art aspects of a unit on the circus.

614. CHANDLER, ANNA CURTIS. *Treasure Trails in Art.* Boston: Hale, Cushman & Flint, Inc., 1937. Pp. xvi+224.

An author of many books on art for children tells the stories of twenty master-painters and presents in full color twenty of their masterpieces that have special appeal for young people. The book aims to develop a love for, and appreciation of, great pictures and to furnish authentic information about each artist and the time in which he lived.

615. DOBBS, ELLA VICTORIA. *First Steps in Weaving.* New York: Macmillan Co., 1938. Pp. x+86.

A book on weaving techniques. A guide for teaching the craft in elementary schools and in beginning courses in schools of higher level.

616. DOUST, LEN A. *Drawing Lessons for Children.* New York: Frederick Warne & Co., Inc., 1937. Pp. 120.

Presents simple guided steps in teaching drawing to children of five to ten years of age. Based on academic concepts rather than on progressive-education ideals of teaching.

617. HAGGERTY, MELVIN E. *Enrichment of the Common Life.* Minneapolis, Minnesota: Published for the Owatonna Art Education Project by the University of Minnesota Press, 1938. Pp. 36.

An inspiring publication written by Dr. Haggerty shortly before his death. A restatement and an expansion of his philosophy and theory of art and the contribution which it can make to living.

618. HOLME, GEOFFREY. *The Children's Art Book.* New York: Studio Publications, 1937. Pp. 96.

A book based on enjoyment of art in everyday life. Carefully selected pictures and the accompanying interesting stories furnish for the child an understanding and an appreciation of beauty in a wide range of subjects, such as animals and pets, landscapes, flowers, ships, streamline trains, airplanes, speeding automobiles, and genre pictures of various kinds.

619. POTTLE, THEODORA. *My Own Picture Book,* Grades I–VIII. Champaign, Illinois: Johnson-Randolph Co., 1937. Pp. 36 each.

A series of eight workbooks for picture study. Each book gives descriptions of nine masterpieces of painting, with questions to be answered and suggested activities. A set of color miniatures of the paintings is attached for pasting into the book.

620. WHITFORD, WILLIAM G., with the co-operation of NORMAN C. MEIER and JOSEPH E. MOORE. "Special Methods and Psychology of the Elementary-School Subjects: Art," *Review of Educational Research,* VII (December, 1937), 464–66, 547–51.

Presents a survey of ninety-four research studies in the arts completed during the period of 1934–37.

INDUSTRIAL ARTS[1]

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621. BAWDEN, WILLIAM THOMAS. "Review of Industrial Education for the Biennium, 1936–37," *Industrial Education Magazine*, XL (March, 1938), 49–62.

A scholarly summary and analysis, continuing a series of increasing interest and helpfulness. Treats "The Youth Problem," "Federal Aid for Vocational Education," "Advisory Committee on Education," "Training for Diversified Occupations," "Relation of the Public High School to Vocational Education," and "Progress in Industrial Arts."

622. BENNETT, CHARLES A. "Teaching Techniques," *Industrial Education Magazine*, XL (January, 1938), 32–34.

One in a series of articles under the general title "Teaching Methods and Materials," presented by the editor of the journal to encourage teaching that demands creative thinking on the part of pupils.

623. BERRY, GODFREY GLENN. "Setting Up a General Industrial-Arts Shop in a Small High School," *Industrial Education Magazine*, XL (May, 1938), 122–25.

True to its title, this article treats purposes, plans, subjects, equipment, and results.

624. CHRISTY, ELMER W. "Psychology and Methods in the High School and College: Industrial Arts," *Review of Educational Research*, VIII (February, 1938), 47–50, 92–95.

A documented review of studies reported during the past three years on objectives, methods, enrichment, safety, selecting textbooks and equipment, graduate study, and trends.

625. COLEMAN, J. B., and OPPERMANN, W. F. "School Production for the Market," *Industrial Arts and Vocational Education*, XXVII (June, 1938), 235–40.

Gives the viewpoint of labor and of the employer on the value of the vocational-education program. Reviews the plan of operation and co-operation at the vocational school in La Crosse, Wisconsin, where the authors are director and co-ordinator, respectively.

626. *The Expanding Program of Industrial Education*. Washington: American Association of School Administrators of the National Education Association, 1938. Pp. 48.

A set of nine papers presented by leaders in industrial education at group meetings on three afternoons at the 1938 convention of the association held at Atlantic City.

[1] See also Item 500 (Sotzin) in the list of selected references appearing in the October, 1938, number of the *School Review*.

627. FRASIER, P. G. "Technique for a Vocational Education Survey of Local Communities." Misc. Res. -1. Des Moines, Iowa: State Board for Vocational Education, 1938. Pp. 50 (mimeographed).

Suggestive schedules and forms are presented for use by local school officials in studying the occupational training needs of their communities. Covers purpose, outline of survey, method and procedure, etc., in a direct and serviceable manner.

628. GETMAN, ARTHUR K. "Vocational Education and Progress," *Phi Delta Kappan*, XX (February, 1938), 188–89.

A brief, forceful, and philosophic statement, made as part of the presidential address at the 1937 annual convention of the American Vocational Association.

629. GORE, L. LAWTON, and ALEXANDER, CARTER. "Guide to the Literature on Industrial Arts," *Industrial Education Magazine*, XL (March, 1938), 70–76.

Indicates materials, as well as a technique or a check list, for persons who would make use of the increased and diversified literature of industrial arts.

630. KROLL, HARRY W. "Industrial Arts for Girls," *Industrial Arts and Vocational Education*, XXVII (April, 1938), 142–47.

The most extensive and worthy writing on the subject which has appeared to date. Deals with justification for the course, objectives, and instructional units. Includes a bibliography. On the basis of a questionnaire, units are evaluated and ranked as to importance.

631. PROFFITT, MARIS M. (Chairman). *Industrial Arts—Its Interpretation in American Schools.* Report of a Committee Appointed by the Commissioner of Education. United States Office of Education Bulletin No. 34, 1937. Pp. vi+126.

A comprehensive and forward-looking statement of the origins, functions, practices, and problems of industrial arts as "a curriculum area rather than a subject or course" and as a phase of general education. Treatment is by types or levels of schools, and much attention is given to offerings for adults. A chapter on administration and supervision is included.

632. SCHMIDT, FRED J., JR. "A Point of View," *Industrial Arts and Vocational Education*, XXVII (June, 1938), 227–31.

A summarization of literature pointing to the better co-ordination or integration of art, industrial arts, and household arts, and of all these with the more "general" subjects of the curriculum. A good bibliography is included.

633. "School Shop Annual," *Industrial Arts and Vocational Education*, XXVII (March, 1938), 85–132 and 1A–80A.

The "School Shop Annual" is a feature in the growing literature of industrial education. The present number contains seven articles on "School Shops," six on "School-Shop Planning," five on "Shop Management," four on "Shop Courses," one on "Shop Safety," and four miscellaneous articles entitled,

respectively, "The Ideal Teacher," "Connecting School and Modern Industry," "Securing Interest in the Industrial-Arts Shop," and "An Experiment in Correlation." There are also equipment lists and advertisements of tools, machines, and supplies.

634. SCHWEICKHARD, DEAN M. "Possibilities for Vocational-Education Courses in Regular High Schools," *Industrial Education Magazine*, XL (January, 1938), 8–10.

A brief, direct, and timely statement. Discusses the need for courses, types of courses, pupils' schedules, teachers' schedules, and teachers' qualifications, in trade fields, homemaking, and part-time continuation classes.

635. SHIMMICK, JOHN JOSEPH. "Thirty-five Claims for the Textbook in Industrial Arts," *Industrial Education Magazine*, XL (March, 1938), 92–94.

A brief report of an extensive survey of the literature in support of a more general use of basic textbooks in the presentation of shop and drawing courses.

636. SMITH, ROBERT E. "Teaching Methods Which Increase Industrial-Arts Achievements," *Industrial Arts and Vocational Education*, XXVII (May, 1938), 185–88.

Explains objectives in uncommon variety and detail. Discusses methods, procedures, and activities assumed to guarantee these outcomes in the changed lives of pupils.

637. STUDEBAKER, J. W. "Education for the 85 Per Cent," *American Vocational Association Journal and News Bulletin*, XIII (February, 1938), 3–9. (Also in *Industrial Arts and Vocational Education*, XXVII [May, 1938], 179–82.)

The United States Commissioner of Education discusses current social conditions, training needs, program purposes, and patterns.

638. VAN DEUSEN, CLINTON SHELDON. "Industrial Arts in the Small School," *Industrial Education Magazine*, XL (May, 1938), 126–29.

An inspiring and descriptive statement of how real problems have been met in one of the most difficult school situations. The county is the administrative unit in Medina County, Ohio. The seemingly necessary plan of having teachers with combination schedules has been largely discontinued in industrial arts and other "special" subjects.

639. WIDDOWSON, H. T. "Training Leaders for Retail Sales Conferences." St. Paul, Minnesota: St. Paul Public Schools and Vocational Education Division of the State Department of Education, 1938. Pp. 60 (mimeographed).

A report of a course, sixty hours in length, for the training of leaders who will, in turn, conduct retail-sales conferences under city-school sponsorship and with federal moneys given in aid under the George-Deen Law. Provides illustrations of co-operative planning, conference procedure, materials of instruction, practice periods, and evaluation. A bibliography is appended.

HOME ECONOMICS[1]

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640. BAILEY, C. O. "Demonstration versus Discussion in Teaching Laboratory Techniques in Food Preparation at the Junior High School Level." Unpublished Master's thesis, Iowa State College of Agriculture and Mechanic Arts, 1937. (Abstracted in "Notes on Graduate Studies and Research in Home Economics and Home Economics Education 1937–38," pp. 118. United States Office of Education, Misc. 2086, June, 1938.)

A comparison of the outcomes in fundamental techniques and manipulative processes secured from the two methods of teaching was in favor of the demonstration method.

641. BROWN, CLARA M. "Home-Economics Survey." St. Paul, Minnesota: Public Secondary Schools, 1938. Pp. 44 (mimeographed).

An investigation was made in one city of the wage-earning experiences of girls in Grades VII and VIII and in senior high school and of the future plans of these girls. Recommendations were made regarding the needs to be met by home-economics teachers in that city.

642. *Course of Study in Homemaking*, pp. 10–26. Bulletin of the State Department of Education, Vol. XIII, No. 6. Austin, Texas: State Department of Education, 1937.

Four suggestive units for children below Grade VIII are included, with the objectives and concepts to be developed and suggested types of experiences.

643. FAULKNER, MARY. "Meeting the Needs of Over-Age Dull Normal Children," *Journal of Home Economics*, XXIX (October, 1937), 551–52.

A description of the methods used by one city system to help over-age pupils in elementary school develop ability in homemaking and self-confidence in meeting situations.

644. *A Guide for the Improvement of Instruction with Sample Source Materials*, pp. 11–66. State Department of Education Bulletin No. 123. Indianapolis, Indiana: State Department of Education, 1938.

The suggestions for emphasis in home economics in Grades VII and VIII are accompanied by guides for studying the needs in local situations.

645. HATCHER, LATHAM. "Home Economics Service in Rural Areas," *Journal of Home Economics*, XXX (June, 1938), 380–83.

To meet the need for homemaking training for rural girls involves emphasis on home economics as a part of the training of rural-school teachers, the employment of itinerant home-economics teachers to work with rural teachers,

[1] See also Items 237 (Lindeman) and 242 (Walsh) in the list of selected references appearing in the March, 1938, number of the *School Review*.

and practical experience in underprivileged rural areas for prospective home-economics teachers.

646. MEVES, IRENE, and TRYON, HELEN L. "Home Arts in the Integrated Program in the Elementary Schools," *Practical Home Economics*, XV (October, 1937), 355–84; "An Activity Unit for Second Grades," ———, (November, 1937), 397, 428, 430, 432; "Home Arts in the Integrated Program,"———, (December, 1937), 448–49.

Describes a plan of co-operation between grade and home-economics teachers and also the experiences and the outcomes of the two units which they developed.

647. "New Ways of Teaching Home Economics—A Symposium," *Journal of Home Economics*, XXX (May, 1938), 310–23.

Descriptions of emphases and procedures used in several junior and senior high schools.

648. ODELL, LILLIAN E. "A Cafeteria Unit," *Arizona Teacher*, XXVI (May, 1938), 244–45.

Describes experiences in health, language, writing, spelling, number work, art, etiquette, and food values involved in this unit for second-grade pupils.

649. REEVES, GRACE G. "Home Living Problems," *Journal of Home Economics*, XXX (May, 1938), 289–92.

Discusses the fivefold contribution of home economics and the means of developing a home-living emphasis in each of the twelve school grades of one school.

650. SOWERS, ALICE. "Parent-Child Relationships from the Child's Point of View," *Journal of Experimental Education*, VI (December, 1937), 205–31.

Some of the family problems and the social-relations problems of young people between the ages of ten and twenty-two were revealed through essays and analyzed according to age and sex.

651. SPAFFORD, IVOL. "Home Economics for the Other Sex," *Practical Home Economics*, XVI (January, 1938), 12, 28.

Suggests some points of emphasis and describes a few plans for work with boys at various grade levels.

652. STEVENS, WILLIE. "Thanksgiving in a Fifth Grade," *Alabama School Journal*, LV (November, 1937), 12.

Home life and the influences which shaped the ideas and the characteristics of a people were studied through an investigation of the origin and the meaning of Thanksgiving Day in America.

653. STRANG, RUTH; CURTISS, MAYBELLE; and OVERS, HELEN. "Home Economics as Guidance," *Journal of Home Economics*, XXX (January, 1938), 1–5.

Discusses the guidance opportunities open to home-economics teachers through (1) personal relations with students, (2) skills and information to be developed, (3) provisions for individual differences, and (4) individual counseling.

LIBRARY TRAINING

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654. ALDRICH, GRACE L. "A Library Catalogue Lesson," *Elementary English Review*, XIV (October, 1937), 209–12.

A practical and clear description of lessons used in fourth-grade classes of the Horace Mann School of Teachers College, Columbia University, for the purpose of developing skill in the use of the card catalogue.

655. ALEXANDER, CARTER. "A Library Aladdin Lamp for the Classroom," *National Elementary Principal*, XVII (December, 1937), 69–71.

Describes training intended to help children in the use of card files. Also describes how pupils, with the aid of the teacher, may make and use files in the classroom and have practice in finding material which is arranged alphabetically.

656. MOTT, CAROLYN, and BAISDEN, LEO B. *The Children's Book on How To Use Books and Libraries*, pp. 208; *Children's Library Lesson Book*, pp. 32. New York: Charles Scribner's Sons, 1937.

A simple textbook and an attractive workbook in library science which have been tried out with children for several years in the William Land Elementary School in Sacramento, California. For Grade IV and beyond.

657. RAMSEY, ELOISE. "Introducing the Illustrator," *Childhood Education*, XIV (April, 1938), 344–48.

Describes ways of giving young children intimate experiences with beautiful books as a preliminary to library training.

658. SAMUELSON, AGNES. "Agnes Samuelson Talks to Teachers about School Libraries," *Instructor*, XLVII (March, 1938), 10, 77.

Treats of ways of giving children meaningful experiences in small libraries in caring for books, in using books, etc.

659. SAYERS, FRANCES CLARKE. "Lose Not the Nightingale," *Horn Book*, XIII (July–August, 1937), 222–35.

This paper, which was read before the section for library work with children at the annual conference of the American Library Association in June, 1937, will be of interest to teachers of library work and reading. It is concerned with attitudes toward reading.

HEALTH AND PHYSICAL EDUCATION

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660. CONRAD, HOWARD L., and MEISTER, JOSEPH F. *Teaching Procedures in Health Education.* Philadelphia: W. B. Saunders Co., 1938. Pp. 160.

Tells how to select subject matter and how to plan and present lessons.

661. DAVIS, JOHN EISELE. *Play and Mental Health.* New York: A. S. Barnes & Co., Inc., 1938. Pp. xvi+202.

A discussion of how the growth and the development of wholesome mental expression is best attained through the integration of mental and bodily processes.

662. DEAN, VIRGINIA. "Social Dancing for Fifth and Sixth Grades," *Journal of Health and Physical Education*, IX (April, 1938), 220–21.

A description of procedures used in teaching this increasingly popular activity to elementary-school children.

663. DRENCKHAHN, VIVIAN V., and GROUT, RUTH E. "Health Materials for Rural Schools," *Journal of Health and Physical Education*, IX (March, 1938), 152–53.

Tells where health materials may be obtained.

664. ENGLISH, COLIN. "The Place of Physical Education in the Elementary School," *Physical Education, Health and Recreation Digest*, IV (March, 1938), 30.

Maintains that correlation of physical education with other school subjects is most desirable in promoting a well-rounded normal life.

665. GLASSOW, RUTH B., and BROER, MARION R. *Measuring Achievement in Physical Education.* Philadelphia: W. B. Saunders Co., 1938. Pp. 344.

May be used as an aid in selecting and evaluating tests for use in elementary schools.

666. GREGORY, ANNIE LAURIE. "The Story of Food," *Journal of Health and Physical Education*, IX (March, 1938), 131–33.

How one elementary-school class worked out a unit on foods.

667. HUSSEY, MARGUERITE M. *Teaching for Health.* New York: New York University Bookstore (18 Washington Place), 1938. Pp. xvi+312.

A general discussion of the relation of good health to effective living.

668. JONES, EDWINA L. "Organized Recess," *Physical Education, Health and Recreation Digest*, IV (March, 1938), 35–36.

The problem of the "hit-or-miss" recess is solved by making the recess a supplement to the physical-education period.

669. LA SALLE, DOROTHY. *Physical Education for the Classroom Teacher.* New York: A. S. Barnes & Co., Inc., 1937. Pp. xii+210.

An aid to the classroom teacher who has only limited experience in the physical-education field.

670. MCGINTY, MARGARET H. "Festivals in the School Program," *Journal of Health and Physical Education*, VIII (October, 1937), 465–68, 507–8.

A means of using every child in presenting physical-education activities to parents.

671. RAPPAPORT, MARY B. "Headed for Healthful Living," *Journal of Health and Physical Education*, VIII (November, 1937), 529–31, 574.

A comprehensive discussion of the change in health education from a study of physiology to the promotion of healthful living.

672. SHAFER, MARY S. *Rhythms for Children.* Music by Mary Morgan Mosher. New York: A. S. Barnes & Co., Inc., 1938 (revised). Pp. 48.

New rhythms added to a collection of rhythms formerly published in three pamphlets. The presentation in one volume should be convenient and valuable.

673. SMITH, HELEN NORMAN, and COOPS, HELEN L. *Physical and Health Education.* Chicago: American Book Co., 1938. Pp. xii+324.

An explanation of the work of the specialist in physical education from the viewpoint of the classroom teacher. Gives practical assistance in selecting program material.

674. STOREY, EDWARD J. "Control of Colds in School," *Journal of Health and Physical Education*, IX (January, 1938), 35–37, 54.

Good instruction on the control of colds.

675. WALL, FRANCES P., and ZEIDBERG, LOUIS D. *Health Guides and Guards.* New York: Prentice-Hall, Inc., 1938 (revised). Pp. xii+380.

Intended for use in teaching health education.

Educational Writings

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REVIEWS AND BOOK NOTES

SCHOOL ADMINISTRATION IN THE SMALLER COMMUNITIES.—There can be little doubt that the problems of school administration in the smaller communities have had scant attention. Almost uniformly, the educational literature has directed attention to the complexities of organization, administration, and leadership in the large city schools. Yet the more intimate relation of the village superintendent to his community and his staff may produce problems more immediate and acute than those faced by his colleague in a city school. Consequently Goodier and Miller[1] have undoubtedly made a significant contribution by their comprehensive treatment of the problems of leadership in the smaller schools.

The work is exhaustive yet concrete. The larger principles of educational practices are always stated, and the application of the principles in practical situations is indicated. The book contains little statistical or original experimental data, but it reports numerous recognized studies and surveys of current practice. While the treatment is undoubtedly empirical, the application of principle and philosophy to policy and practice is adequately specific. This combination has resulted in what should prove to be a very useful manual for beginners in administration.

The book is also designed as a textbook for courses in elementary administration, and the questions and problems at the end of each chapter suggest many practical applications of principle and further detailed study. An excellent bibliography, specifically related to every problem discussed, provides a complete and ready reference for student and practitioner alike.

The authors have maintained a perspective which avoids both the remote abstraction of the theorist and the myopic distortion of the limited practitioner.

The reader is agreeably surprised by the scope of the book after having reacted to the limitations suggested by the title. Certainly nobody would quarrel with the authors over the need or the timeliness of this publication, but the reader experiences a faint regret that such an excellent and comprehensive treatment is concealed by a title which, by its reference to town and village schools, suggests a much more limited theme. The book could be consulted with profit by almost any person engaged in educational administration; yet some may not penetrate the disguise of the title. While it may be farfetched to engage in an academic discussion of terms, the reviewer believes that the inclusion of all lead-

[1] Floyd T. Goodier and William A. Miller, *Administration of Town and Village Schools*. St. Louis, Missouri: Webster Publishing Co., 1938. Pp. xiv+336. $2.00.

ership activities under "administration" may be somewhat misleading. Standing alone in the title, the term suggests the discredited artificial separation of administration and supervision. However, the authors apparently employed it as a general term including all the activities of responsibility. Perhaps some such term as "leadership" might have more appropriately expressed the modern and the democratic viewpoint of this extremely useful book.

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EXPERIMENTAL STUDIES OF THE EFFECT OF VOCABULARY TRAINING ON COMPREHENSION IN READING.—The findings of an investigation of the effects of specific teaching of meaning as compared with more or less incidental learning of vocabulary are reported in a monograph[1] by Professor William S. Gray and Miss Eleanor Holmes in one of the publications of the Laboratory Schools of the University of Chicago. This monograph drives another nail in the coffin of incidental learning as a means of acquiring specific knowledge or skills. The authors assume as their basic hypothesis that a crucial problem in the teaching of reading at the present time is that of developing the meanings of the extensive vocabularies required if children are to read the varied materials of the expanding curriculum.

It is pointed out that, according to Thorndike, the sixth-grade child needs to know from five thousand to ten thousand words and that by the end of Grade IX a pupil should have a vocabulary range of from ten thousand to twenty-five thousand words in order to comprehend the varied materials at that level. It is assumed that skilled teaching can make up the gap between the vocabularies which pupils have achieved and those that are theoretically desirable. The authors fail to note the equally valid assumption that reduction of the vocabularies used in textbooks in the middle grades and junior high school might simplify the problem still further.

With the basic hypothesis established, the monograph then proceeds to summarize existing data on the nature of meaning, the factors related to vocabulary growth, the types and causes of vocabulary difficulties, and methods of promoting vocabulary growth. This treatment is an excellent summary after the well-known and effective manner of Professor Gray.

The report then proceeds to state the experimental problem and to outline the procedures used in solving it. A preliminary study was conducted to determine whether pupils could recognize their deficiencies and needs with respect to the meanings of words. The findings were largely negative, although a more comprehensive experiment on this problem by Harvey C. Tilley ("A Technique

[1] William S. Gray and Eleanor Holmes, *The Development of Meaning Vocabularies: An Experimental Study*. Publications of the Laboratory Schools, No. 6. Chicago: Department of Education, University of Chicago, 1938. Pp. viii+140. $1.50.

for Determining the Relative Difficulty of Word Meanings among Elementary School Children," *Journal of Experimental Education*, V [September, 1936], 61–64) showed correlations of .53 to .97 between children's judgments of difficulty and their performances on multiple-choice tests. This fact, however, does not mean that children do not need guidance in enlarging meanings and does not detract from the significance of the Gray and Holmes report.

The major study of the experiment was organized to measure the effects on comprehension of incidental versus direct methods of developing vocabulary growth. Control and experimental groups of equivalent ability were used. The pupils in the experimental groups were given specific vocabulary training, while in the control group dependence was placed on incidental learning of vocabulary.

The results show that incidental learning is definitely inferior to direct teaching, that the experimental pupils excelled the control pupils in reading efficiency, and that the use of context alone in teaching meanings is inferior to direct methods of teaching. A supplementary study of methods of vocabulary development and a valuable appendix complete the volume.

The experiments here reported were well organized, administered, and controlled. The isolation of the experimental factor was carefully made. In addition to the significance and the value of the conclusions, the monograph is valuable for the many useful methods of vocabulary development which are presented. Teachers and supervisors of reading will find the book helpful.

The monograph should do much to call a halt to the use of incidental methods of vocabulary development. There is abundant evidence here that systematic guidance in learning complex skills is far to be preferred over incidental methods. Teaching children to read is not solely a problem of providing rich reading opportunities.

G. A. Yoakam

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Organic Conception of Learning in the Elementary School.—The past ten years have witnessed much research in child growth and development and in the organic conception of learning, the preparation of some courses of study embodying the principles derived from such research, and the publication of some professional books on methods of teaching. A recent book[1] by Hockett and Jacobsen is designed to bring practical helps on classroom situations "to teachers in their daily work and to prospective teachers who seek to understand the how and the why of modern education. . . . . The attempt throughout the book has been to weave together theory and practice, so that the justification and application of educational principles are presented simultaneously. The point of view is that of the modern organic conception of learning" (p. iii). The

[1] John A. Hockett and E. W. Jacobsen, *Modern Practices in the Elementary School*. Boston: Ginn & Co., 1938. Pp. vi+346. $2.60.

ten chapter titles are: "Current Trends in Elementary Education," "Organizing the Class for Living and Learning," "Developing a Unit of Work," "Managing the Daily Program," "Making the Most of the Environment," "Utilizing Children's Latent Creative Abilities," "Making Discipline Educative," "Meeting Individual Needs," "Meeting the Needs of Unusual Children," and "The Teacher's Resources."

In the Preface to the book the authors say that questions and problems raised by large numbers of teachers were recorded and classified as a means of determining the scope and the nature of the material to be included. Completed chapters were submitted to teachers, supervisors, and principals for criticism and suggestion before final publication. The book bears every evidence that its content is really built around the questions which classroom teachers ask about the practical application of modern theories in elementary education. In fact, the book strikes so directly at the questions and the problems of classroom teachers of today that the reviewer was delighed with it. The practical treatment of urgent classroom problems is supplemented with a number of splendid photographs showing children at work in the kind of educational program encouraged by the authors.

The book will be criticized by some because it is not so inclusive as might be desired, but it should be remembered that the authors did not attempt an all-inclusive treatment of elementary-school teaching. The reviewer's main criticism is that the book is not so helpful as it might be to teachers who are in the early stages of the transition from the "subject-minded" school to the "child-development" school. The majority of elementary-school teachers in the country today are still in the early stages of that transition. These teachers are eager for help on their problems, and someone should give them the kind of assistance that Hockett and Jacobsen have given to those who are a little farther along in the transition.

HENRY J. OTTO

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EDUCATIONAL PSYCHOLOGY, CONSERVATIVE AND COMPREHENSIVE.—The Macmillan Company, through Professors Douglas and Holland, gives us another book[1] on educational psychology—a book which merits serious consideration. It is divided into four parts: (1) "The Subject Matter and Scientific Bases of Educational Psychology," (2) "Environment and Heredity," (3) "Learning," and (4) "Measurement in Educational Psychology."

The treatment of each of these four heads consists, for the most part, in a review of classical experimentation, with inferential discussion. The chapter on "Bodily Structures and Their Functions" is especially well written and well il-

[1] O. B. Douglas and B. F. Holland, *Fundamentals of Educational Psychology.* New York: Macmillan Co., 1938. Pp. xvi+598. $2.50.

lustrated. The authors have been unusually successful in translating the technical findings of experimentation into language that students can understand.

Both educational measurement and the statistics of measurement are treated —a combination which will probably make the book attractive in schools that do not have separate measurement courses in their training cycle. These chapters are probably desirable therefore, although many of the recent textbooks in educational psychology are omitting them. On the other hand, Douglas and Holland omit, or treat slightly, such topics as "personality training," "psychology of study," and "mental hygiene," which seem to be in increasing favor with authors in the field and in demand by students in the courses.

Attention should be called to one other matter: a comparative paucity of illustrations from actual classroom situations, combined with a reliance on the student's inferential ability which borders on the optimistic. This criticism, if it be such, many of the rest of us have deservedly shared in the past and probably shall share in the future. When they are writing textbooks, college professors seem to find it difficult to forget their colleagues.

The format, as always with the Macmillan Company, is excellent. The Index, complete in every detail, is above criticism. The documentation is, in general, well chosen and complete although the last decade is a little too sparsely represented and the publishers of books are not given.

FRANCIS F. POWERS

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VARIED CONTENT IN A "WORK-TYPE" READER.—A recent publication[1] contains much material of interest. It is a reader of the work type intended for use in the early middle grades in teaching the reading skills needed in history, geography, etc. The twenty-six chapters cover a wide range of subjects. The illustrations are in black and white, many of them photographs.

The book is uneven as to difficulty. Some of the stories are very readable and would captivate a fourth-grade pupil, for example, chapter vi, "An Early Voyage down the Ohio River"; chapter viii, "Schools of Olden Times"; chapter xiv, "American Children in Alaska"; and chapter xxii, "Why and How Animals Sleep."

The authors stress the use of the dictionary for explaining difficult vocabulary, and they provide some definite instruction to aid the child to help himself. Such words as "library," "market," and "cowboy" are defined, while "limestone deposits," "clouded hills," and "natural advantages" are left to inference. The latter illustrations are taken from chapter vii, "How Pittsburgh Grew." This story is particularly difficult, and one statement in the check test for the story reads: "Pittsburgh owes the development of its industries principally to ———." Such abstractions are far removed from the experience and the vocab-

[1] Gerald A. Yoakam, William C. Bagley, and Philip A. Knowlton, *Reading To Learn*, Introductory Book. New York: Macmillan Co., 1938. Pp. x+390. $0.88.

ularies of pupils in the early middle grades. There are other difficult chapters, particularly the last three. It is suggested that this fine content be used with discrimination, the more advanced stories being reserved for use in Grade VI.

HELEN E. RICHARDSON

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ARTICULATING SOCIAL AND NATURAL SCIENCES.—Anyone interested in the fusion of social and natural sciences in the elementary school can turn with profit to the series of books under review.[1] Not less than seven authors have participated in the enterprise, and five illustrators are recognized by the placement of their names on title-pages. Both in the Preface and in the content these authors reveal a central interest in a happy fusing of natural science and the good civic behavior of children for which schools continuously strive. It is quite possible that the series will not meet with the full approval of the uncompromising protagonist of the social studies as the core of the curriculum, and doubtless some of the very positive devotees of the natural sciences will find a certain thinness in some of the materials dealing with elementary aspects of these sciences. Many a pedagogical tilt has taken place over such issues, and because of their nature—and, perhaps one may add, because of the meticulous nature of certain pedagogues—such tilting matches will, in all probability, take place in the future. The reviewer, however, is not deeply concerned about such differences. He is vitally concerned that new offerings for the elementary school shall tap and fuse the materials of these fields in a process of wholesome living within the schools. An interest in, and a knowledge of, animal life, if properly developed, can contribute much to happy and successful social living.

This seven-book series opens with the primer *Fuzzy Tail*, and a most attractive primer it is. The illustrations are particularly good and do their full share in carrying the theme of the book. The element of surprise is cleverly used, and interesting developments in the adjustments of all the members of the family through the coming of Fuzzy Tail are well brought out. Due concern has been given to vocabulary problems, short phrases, and repetition. Indeed, this primer may well stand on its own merits apart from the series. *Sniff* holds the center of the stage in Book I, which is a good dog tale giving wise counsel in keeping and caring for a dog. There is a cordial and subtle emphasis on good

[1] Our Animal Books: A Series in Humane Education. Edited by Frances E. Clarke. Primer, *Fuzzy Tail* by Arensa Sondergaard, pp. vi+134, $0.72; I. *Sniff* by James S. Tippett and Martha Kelly Tippett, pp. vi+184, $0.80; II. *Pets and Friends* by Emma A. Myers, pp. vi+186, $0.84; III. *The Pet Club* by Kathrine W. Masters, pp. viii+224, $0.92; IV. *On Charlie Clarke's Farm* by Katharine L. Keelor, pp. vi+196, $0.72; V. *Our Town and City Animals* by Frances E. Clarke and Katharine L. Keelor, pp. vi+218, $0.76; VI. *Paths to Conservation* by James S. Tippett, pp. xii+300, $0.88. Boston: D. C. Heath & Co., 1937.

human behavior toward pets. Book II, *Pets and Friends*, attempts to extend interests and information concerning household pets. It lacks something of the buoyancy of the preceding volumes but must, nevertheless, be rated an attractive book. *The Pet Club*, Book III, is more nearly a "nature reader" than any other book in the series. Interesting sketches of a number of animals are given and, with them, helpful suggestions on care and diet. Book IV, *On Charlie Clarke's Farm*, describes the experiences of Charlie and his family as they move from the city to grandfather's farm where Charlie's father had lived as a boy. *Our Town and City Animals*, Book V, strikes a neglected chord in developing an interest in animals living within towns and cities. Some of the attractive topics included are: "The Pet Show," "Abandoned Animals," "The Seeing Eye," "The Winter Bread Line," and "The Jack London Club." One chapter is given to the important topic, "Books on Animals." The last book of the series is entitled *Paths to Conservation*. The contents are true to the title of the volume and include many items that do not logically come within the title for the series, "Our Animal Books."

The title of the series, however, seems narrow in the light of the nature of the materials. Possibly this title is the weakest phase of the series. Many of the best aspects of the materials are social in character, and not all are closely identified with animals. Fortunately each book can stand on its own merits without relation to other volumes in the series. In physical makeup, type, illustrations, and careful preparation of textual materials, the series represents good book-making. The last volume may be a bit heavy for some sixth-grade classes, but its value in seventh- or eighth-grade groups should not be overlooked. On the whole, all persons responsible for the enterprise may take satisfaction in the thought that they have made a contribution to life as it should be in the modern elementary school.

CLYDE B. MOORE

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

BEDFORD, JAMES H. *Youth and the World's Work: Vocational Adjustment of Youth in the Modern World.* Los Angeles, California: Society for Occupational Research, Ltd. (University of Southern California Station), 1938. Pp. viii+140.

BOND, EVA. *Reading and Ninth Grade Achievement.* Teachers College Contributions to Education, No. 756. New York: Teachers College, Columbia University, 1938. Pp. x+62. $1.60.

The Book of Major Sports. William L. Hughes, editor and collaborator. "Football" by W. Glenn Killinger; "Basketball" by Charles C. Murphy; "Base-

ball" by Daniel E. Jessee; "Track and Field" by Ray M. Conger. New York: A. S. Barnes & Co., Inc., 1938. Pp. 396. $3.00.

Business as a Social Institution. Proceedings of the University of Chicago Conference on Business Education, 1938. Chicago: University of Chicago Press, 1938. Pp. viii+120. $1.00.

CASSIDY, ROSALIND. *New Directions in Physical Education for the Adolescent Girl in High School and College: A Guide for Teachers in Co-operative Curriculum Revision.* New York: A. S. Barnes & Co., Inc., 1938. Pp. xvi+232. $2.50.

CHRISTIANSON, HELEN. *Bodily Rhythmic Movements of Young Children in Relation to Rhythm in Music: An Analytical Study of an Organized Curriculum in Bodily Rhythms, Including Potential and Functioning Aspects in Selected Nursery School, Kindergarten, and First Grade Groups.* Teachers College Contributions to Education, No. 736. Series in Curricula for Child Growth. New York: Teachers College, Columbia University, 1938. Pp. x+196. $2.10.

EWING, IRENE R., and EWING, ALEX. W. G. *The Handicap of Deafness.* New York: Longmans, Green & Co., 1938. Pp. xii+328. $5.40.

HAGGERTY, HELEN RUTH. *Certain Factors in the Professional Education of Women Teachers of Physical Education.* Teachers College Contributions to Education, No. 741. New York: Teachers College, Columbia University, 1938. Pp. viii+88. $1.60.

HENRY, NELSON B., and KERWIN, JEROME G. *Schools and City Government: A Study of School and Municipal Relationships in Cities of 50,000 or More Population.* Chicago: University of Chicago Press, 1938. Pp. xii+104. $1.50.

JENSEN, ARNE S. *Psychology of Child Behavior.* New York: Prentice-Hall, Inc., 1938. Pp. xxii+664. $3.85.

LAMBERT, ASAEL C. *School Transportation.* Stanford University, California: Stanford University Press, 1938. Pp. xiv+124. $3.00.

LANE, ROBERT HILL, with GERTRUDE M. ALLISON, ETHELYN BISHOP, and DOROTHY JOHNS MCNARY. *The Progressive Elementary School: A Handbook for Principals, Teachers, and Parents.* Boston: Houghton Mifflin Co., 1938. Pp. x+198+xii. $1.90.

MCLEAN, DONALD. *Knowing Yourself and Others: Mental Hygiene for Young People.* New York: Henry Holt & Co., 1938. Pp. xx+276. $1.40.

MILLER, DAVID F., and BLAYDES, GLENN W. *Methods and Materials for Teaching Biological Sciences: A Text and Source Book for Teachers in Training and in Service.* New York: McGraw-Hill Book Co., Inc., 1938. Pp. xii+436. $3.50.

MURRAY, JOSEPHINE, and BATHURST, EFFIE G. *Creative Ways for Children's Programs.* New York: Silver Burdett Co., 1938. Pp. xiv+396.

NOBLE, STUART G. *A History of American Education.* New York: Farrar & Rinehart, Inc., 1938. Pp. xvi+440. $2.50.

Objectives and Problems of Vocational Education. Edited by Edwin A. Lee. New York: McGraw-Hill Book Co., Inc., 1938. Pp. x+476. $3.50.

On Going to College: A Symposium. New York: Oxford University Press, 1938. Pp. 298. $2.50.

PICKETT, HALE. *An Analysis of Proofs and Solutions of Exercises Used in Plane Geometry Tests.* Teachers College Contributions to Education, No. 747. New York: Teachers College, Columbia University, 1938. Pp. 120. $1.60.

POWERS, FRANCIS F.; MCCONNELL, T. R.; TROW, WILLIAM CLARK; MOORE, BRUCE V.; and SKINNER, CHARLES E. *Psychology in Everyday Living.* Boston: D. C. Heath & Co., 1938. Pp. x+512. $2.75.

The Purposes of Education in American Democracy. Washington: National Education Association of the United States and the American Association of School Administrators, 1938. Pp. x+158. $0.50.

SIMPSON, RAY H. *A Study of Those Who Influence and of Those Who Are Influenced in Discussion.* Teachers College Contributions to Education, No. 748. New York: Teachers College, Columbia University, 1938. Pp. 90. $1.60.

STANTON, MILDRED B. *Mechanical Ability of Deaf Children.* Teachers College Contributions to Education, No. 751. New York: Teachers College, Columbia University, 1938. Pp. viii+66.

THORPE, LOUIS P. *Psychological Foundations of Personality: A Guide for Students and Teachers.* New York: McGraw-Hill Book Co., Inc., 1938. Pp. xvi+602. $3.50.

UPDEGRAFF, RUTH; DAWE, HELEN C.; FALES, EVALINE E.; STORMES, BERNICE E.; and OLIVER, MARY G. *Practice in Preschool Education.* New York: McGraw-Hill Book Co., Inc., 1938. Pp. xvi+408. $3.00.

WATERHOUSE, RALPH H. *Training Elementary-School Principals.* Publication No. 39. Akron, Ohio: Akron Board of Education, 1938. Pp. viii+82.

WATSON, GOODWIN; COTTRELL, DONALD P.; and LLOYD-JONES, ESTHER M. *Redirecting Teacher Education.* New York: Teachers College, Columbia University, 1938. Pp. x+106. $1.35.

WRIGHTSTONE, J. WAYNE. *Appraisal of Newer Elementary School Practices.* New York: Teachers College, Columbia University, 1938. Pp. xiv+222. $2.25.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

Alice and Jerry Books: Reading Foundation Series. *Happy Days* by Mabel O'Donnell, pp. 32, $0.24; *Here We Go*, pp. 48, $0.32; *Guidebook for Teachers on Initial Stages of Reading Readiness*, pp. 176, by Emmett A. Betts and Mabel O'Donnell. Evanston, Illinois: Row, Peterson & Co., 1938.

ATWOOD, WALLACE W., and THOMAS, HELEN GOSS. The Earth and Its People: Book III, *Nations beyond the Seas.* Boston: Ginn & Co., 1938 (revised). Pp. viii+352. $1.56.

AUSTIN, ALMA H. *The Romance of Candy.* New York: Harper & Bros., 1938. Pp. xx+234. $2.50.

BENNETT, MARGARET E., and HAND, HAROLD C. *Group Guidance in High School: A Teachers' Manual To Accompany "School and Life," "Designs for Personality," and "Beyond High School."* New York: McGraw-Hill Book Co., Inc., 1938. Pp. iv+112. $1.00.

BRUNER, HERBERT B., and SMITH, C. MABEL. *Social Studies: Intermediate Grades:* Book II, pp. viii+472, $1.20; Book III, pp. viii+568, $1.40. New York: Charles E. Merrill Co., 1938.

BUSWELL, GUY T., BROWNELL, WILLIAM A., and JOHN, LENORE. *Daily-Life Arithmetics,* Book III. Boston: Ginn & Co., 1938. Pp. x+582. $1.08.

CAGE, MABEL VINSON. *Reading in High Gear.* New York: Harper & Bros., 1938. Pp. x+348. $1.48.

DECATUR, DOROTHY DURBIN. *Two Young Americans in Mexico.* Boston: D. C. Heath & Co., 1938. Pp. vi+274. $0.96.

DULL, CHARLES E. *Safety First—and Last.* New York: Henry Holt & Co., 1938. Pp. viii+242+xxii. $1.20.

ENGLEMAN, F. E., SALMON, JULIA, and MCKEMY, WILMA. *Scales and Fins.* Boston: D. C. Heath & Co., 1938. Pp. vi+294. $0.96.

FLYNN, HARRY EUGENE, and LUND, CHESTER BENFORD. *Tick Tock: A Story of Time.* Boston: D. C. Heath & Co., 1938. Pp. vi+234. $0.88.

GEHRES, ETHEL MALTBY. *Everyday Life,* Book II. Social Science Readers. Philadelphia: John C. Winston Co., 1938. Pp. 170. $0.68.

GOODMAN, DAVID. *How To Write.* New York: Globe Book Co., 1938. Pp. x+198+2. $1.08.

HANNA, PAUL R., ANDERSON, GENEVIEVE, and GRAY, WILLIAM S. *Centerville.* Chicago: Scott, Foresman & Co., 1938. Pp. 288.

MCCLURE, C. H., SCHECK, CHARLES C., and WRIGHT, W. W. *The Middle Ages.* Our Developing Civilization. Chicago: Laidlaw Bros., 1938. Pp. x+406. $1.20.

MASON, BERNARD S. *Drums, Tomtoms, and Rattles: Primitive Percussion Instruments for Modern Use.* New York: A. S. Barnes & Co., Inc., 1938. Pp. 206. $2.50.

MASTERS, ROBERT W., and MASTERS, LILLIAN DECKER. *The Curtain Rises: Plays To Produce.* A Collection of Non-royalty Plays with Complete Production Notes on Staging, Directing, and Acting, Designed Especially for High School and Amateur Dramatic Groups. Boston: D. C. Heath & Co., 1938. Pp. x+362. $1.80.

MILES, DUDLEY, and POOLEY, ROBERT C. *Teaching Literature.* A Handbook for Use with the "Literature and Life" Series. Chicago: Scott, Foresman & Co., 1938 (revised). Pp. 248.

MILLIGAN, DAVID FREDERICK. *Fist Puppetry.* New York: A. S. Barnes & Co., Inc., 1938. Pp. xiv+130. $1.50.

MOON, GLENN W. *Story of Our Land and People.* New York: Henry Holt & Co., 1938. Pp. xii+564. $1.92.

Poems for Modern Youth. Edited by Adolph Gillis and William Rose Benét. Boston: Houghton Mifflin Co., 1938. Pp. lx+532+xvi. $1.28.

REDDICK, DEWITT C. *Journalism and the School Paper.* Boston: D. C. Heath & Co., 1938. Pp. viii+342. $1.48.

ROSE, MARY S., and BOSLEY, BERTLYN, with the co-operation of DOROTHY ENGELMANN and ELOISE COFER. *Our Cereals: A Nutrition Unit for the Fourth, Fifth, and Sixth Grades of the Elementary School.* New York: Teachers College, Columbia University, 1938. Pp. vi+34. $0.35.

RUGG, HAROLD. Man and His Changing Society: Vol. II of the Junior High School Course, *Changing Countries and Changing Peoples: An Introduction to World Geography with Historical Backgrounds.* Boston: Ginn & Co., 1938. Pp. xvi+586. $1.88.

RUGG, HAROLD, and KRUEGER, LOUISE. Man and His Changing Society: Vol. VIII of the Elementary School Course, *Mankind throughout the Ages.* Boston: Ginn & Co., 1938. Pp. vi+584. $1.28.

SCHAWE, LOUISE. *Friendly Dogs: Here, There, and Everywhere.* Yonkers-on-Hudson, New York: World Book Co., 1938. Pp. vi+170. $0.88.

Songs and Pictures for Little Folks. Words and Music by Helen C. Knowles. Photographs by Ruth Alexander Nichols. New York: A. S. Barnes & Co., Inc., 1938. $1.50.

VAN BUREN, MAUD. *Quotations for Special Occasions.* New York: H. W. Wilson Co., 1938. Pp. 202. $2.50.

PUBLICATIONS IN PAMPHLET FORM

Annual Report of the General Education Board, 1936–1937. New York: General Education Board (49 West Forty-ninth Street), 1938. Pp. x+148.

ARNETT, TREVOR. *Trends in Enrolment in State and Endowed Colleges and Universities in the United States from 1928–29 through 1936–37.* Occasional Papers, No. 10. New York: General Education Board (49 West Forty-ninth Street), 1938. Pp. viii+64.

Field Studies in Certain New Jersey Secondary Schools. Montclair, New Jersey: Bureau of Field Studies, New Jersey State Teachers College, 1938. Pp. 48.

Field Studies in Schools and Colleges. Montclair, New Jersey: Bureau of Field Studies, New Jersey State Teachers College, 1938. Pp. 74.

Field Studies in a Teachers College: A Description of a Technique for Teacher Training. Montclair, New Jersey: New Jersey State Teachers College, 1938. Pp. 30.

Graduate Studies (Abstracts, 1937–1938). Compiled by H. M. Lafferty. Bulletin of the East Texas State Teachers College, Vol. XXI, No. 5. Commerce, Texas: East Texas State Teachers College, 1938. Pp. 28.

JOHNSON, PALMER O., and HARVEY, OSWALD L., with an Introduction by DOAK S. CAMPBELL. *The National Youth Administration.* Staff Study No. 13. Pre-

pared for the Advisory Committee on Education. Washington: United States Government Printing Office, 1938. Pp. x+122.

NEBRASKA STATE TEACHERS ASSOCIATION. Teachers' Pamphlet No. 6, "Suggested Teachers' Meetings for a Developmental Reading Program" by Major Committee on the Improvement of Instruction (Earle W. Wiltse, Chairman), Educational Planning Commission (mimeographed), $0.25; Educational Bulletin, Mimeographed Series III, No. 1, "Salaries of Public School Teachers, Nebraska, 1937–38 and 1938–39," by Galen Saylor, pp. 32 (mimeographed), $0.40. Lincoln, Nebraska: Nebraska State Teachers Association, 1938.

1,000 and One. The Blue Book of Non-theatrical Films, Fourteenth Annual Edition, 1938–39. Chicago: Educational Screen, 1938. Pp. 104.

Our Debt to the Pacific: A Bibliography for High Schools and Junior Colleges. Pacific House Bibliographies, No. 1. San Francisco, California: Department of the Pacific Area, Golden Gate International Exposition [1938]. Pp. 30.

An Overview of the Saginaw Curriculum Program. Prepared by the Faculty of the Saginaw Public Schools under the Guidance of Chester F. Miller, Superintendent of Schools, and O. I. Frederick, Director of Curriculum Program. Saginaw, Michigan: Saginaw City Schools, 1938. Pp. 92. $1.00.

PETERS, CHARLES C. *Abstracts of Studies in Education at the Pennsylvania State College*, Part VIII (1938). Pennsylvania State College Studies in Education, No. 21. State College, Pennsylvania: School of Education, Pennsylvania State College, 1938. Pp. 48.

Physical Education in Small Rural Schools. State Department of Education Bulletin No. 2. Sacramento, California: State Department of Education, 1938. Pp. x+76.

Programs of Studies. Report of the Committee Appointed To Study High Schools. Pittsburgh, Pennsylvania: Pittsburgh Public Schools, 1938. Pp. 44.

Psychological Tests and Their Uses. Review of Educational Research, Vol. VIII, No. 3. Washington: American Educational Research Association of the National Education Association, 1938. Pp. 213–364. $1.00.

Tenth Annual Report of the Scottish Council for Research in Education, 1937–38. Edinburgh, Scotland: Scottish Council for Research in Education, 1938. Pp. 26.

Twenty-fifth Annual Conference on Educational Measurements: Held at Indiana University April 13, 1938. Bulletin of the School of Education, Indiana University, Vol. XIV, No. 4. Bloomington, Indiana: Bureau of Co-operative Research, School of Education, Indiana University, 1938. Pp. 38. $0.50.

UNITED STATES OFFICE OF EDUCATION PUBLICATIONS:

Bulletin No. 3, 1938—*Nature and Use of the Cumulative Record* by David Segel. Pp. vi+48.

Pamphlet No. 83 (1938)—*Handbook for Compiling Age-Grade-Progress Statistics* by David Segel. Pp. iv+32.

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Educational News and Editorial Comment

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Needs and Problems of the South

Anyone familiar with the history of this country is aware of the very significant part which the South has played in the making of the nation, but relatively few appreciate fully the present importance of the southern states in the national economy. Moreover, the area extending from the Potomac to the Rio Grande occupies a unique and a commanding position in the cultural growth of the nation by virtue of the simple fact that it is coming to be the nation's nursery. In the most populous northern and western states birth-rates are now below what is required to maintain the population at its present level; from Maine to Oregon and north of the Mason-Dixon line there are only two census divisions, the West North Central and the Mountain States, in which fertility among native white women is sufficient for family replacement. In the South, on the other hand, birth-rates are materially higher than necessary to maintain a stable population. The southern states contain only about 29 per cent of the nation's population, but they account for 46 per cent of the excess of births over deaths. The population of Georgia is only slightly more than a third as great as that of California, Oregon, and Washington combined, but Georgia accounts for about 50 per cent more of the nation's natural increase than all three of

these Pacific states. The farm population of the South is now supplying two-thirds of the excess of births over deaths in the entire farm population. Clearly, for years to come the South may be expected to supply the population reserves of the nation. From southern farms—chiefly from tenant farms—redundant population is being drawn off in large volume to make good the deficits of southern and northern cities. Intense population pressure on the resource structure of the South will bring about a continued outward migration of young people in search of economic opportunity. These boys and girls, young men and young women, most of whom will be sons and daughters of tenant farmers and croppers, will be found on the highways and byways of the nation; and, wherever they go, they will carry with them their cultural heritage, their ignorance or lack of it, their ability or inability to carry their own economic weight, their capacity or incapacity to perform their civic duties. Obviously there is a national interest in the South that cuts much deeper than markets or profits, much deeper than any contribution the South may make to the economic well-being of the nation.

The recently published *Report on Economic Conditions of the South* prepared by the National Emergency Council presents in broad outline a striking picture of southern needs and problems. Sections of the report deal with economic resources, soil, population, education, labor, and other vital aspects of southern life. The following paragraphs are quoted from the section dealing with private and public income.

> The wealth of natural resources in the South—its forests, minerals, and fertile soil—benefit the South only when they can be turned into goods and services which its people need. So far the South has enjoyed relatively little of these benefits, simply because it has not had the money or credit to develop and purchase them.
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> Ever since the war between the states the South has been the poorest section of the nation. The richest state in the South ranks lower in per capita income than the poorest state outside the region. In 1937 the average income in the South was $314; in the rest of the country it was $604, or nearly twice as much.
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> Even in "prosperous" 1929 southern farm people received an average gross income of only $186 a year as compared with $528 for farmers elsewhere. Out of that $186 southern farmers had to pay all their operating expenses—tools, fertilizer, seed, taxes, and interest on debt—so that only a fraction of that sum

was left for the purchase of food, clothes, and the decencies of life. It is hardly surprising, therefore, that such ordinary items as automobiles, radios, and books are relatively rare in many southern country areas.

For more than half of the South's farm families—the 53 per cent who are tenants without land of their own—incomes are far lower. Many thousands of them are living in poverty comparable to that of the poorest peasants in Europe. A recent study of southern cotton plantations indicated that the average tenant family received an income of only $73 per person for a year's work. Earnings of share croppers ranged from $38 to $87 per person, and an income of $38 annually means only a little more than 10 cents a day.

The South's industrial wages, like its farm income, are the lowest in the United States. In 1937 common labor in twenty important industries got sixteen cents an hour less than laborers in other sections received for the same kind of work. Moreover, less than 10 per cent of the textile workers are paid more than 52.5 cents an hour, while in the rest of the nation 25 per cent rise above this level. A recent survey of the South disclosed that the average annual wage in industry was only $865 while in the remaining states it averaged $1,219.

In income from dividends and interest the South is at a similar disadvantage. In 1937 the per capita income in the South from dividends and interest was only $17.55 as compared with $68.97 for the rest of the country.

Since the South's people live so close to the poverty line, its many local political subdivisions have had great difficulty in providing the schools and other public services necessary in any civilized community. In 1935 the assessed value of taxable property in the South averaged only $463 per person, while in the nine Northeastern states it amounted to $1,370. In other words, the Northeastern states had three times as much property per person to support their schools and other institutions.

Consequently, the South is not able to bring its schools and many other public services up to national standards, even though it tax the available wealth as heavily as any other section. In 1936 the state and local governments of the South collected only $28.88 per person while the state and local governments of the nation as a whole collected $51.54 per person.

Although the South has 28 per cent of the country's population, its federal income-tax collections in 1934 were less than 12 per cent of the national total. These collections averaged only $1.28 per capita throughout the South, ranging from 24 cents in Mississippi to $3.53 in Florida.

So much of the profit from southern industries goes to outside financiers, in the form of dividends and interest, that state income taxes would produce a meager yield in comparison with similar levies elsewhere. State taxation does not reach dividends which flow to corporation stockholders and management in other states; and, as a result, these people do not pay their share of the cost of southern schools and other institutions.

Under these circumstances the South has piled its tax burden on the backs of

those least able to pay, in the form of sales taxes. (The poll tax keeps the poorer citizens from voting in eight southern states; thus they have no effective means of protesting against sales taxes.) In every southern state but one, 59 per cent of the revenue is raised by sales taxes. In the Northeast, on the other hand, not a single state gets more than 44 per cent of its income from this source, and most of them get far less.

The efforts of southern communities to increase their revenues and to spread the tax burden more fairly have been impeded by the vigorous opposition of interests outside the region which control much of the South's wealth. Moreover, tax-revision efforts have been hampered in some sections by the fear that their industries would move to neighboring communities which would tax them more lightly—or even grant them tax exemption for long periods.

The hope that industries would bring with them better living conditions and consequent higher tax revenues often has been defeated by the competitive tactics of the communities themselves. Many southern towns have found that industries which are not willing to pay their fair share of the cost of public services likewise are not willing to pay fair wages, and so add little to the community's wealth.

Schools and City Government—Should They Be More Closely Co-ordinated or Kept Separate?

Within recent years there has developed a sharp conflict of opinion between political scientists and educators with respect to the relation of the schools to city government. Most political scientists are of the opinion that a closer co-ordination of the schools and municipal governments would result in more efficient administration both in the area of education and in the area of municipal affairs proper. Most educators, on the other hand, as well as citizens generally, look with fear and misgiving upon any attempt to co-ordinate or to consolidate school and municipal administration. It is commonly believed and asserted that to extend municipal control over the schools would be to open the doors to political influences of a kind that would prove harmful, if not disastrous. This point of view was vigorously expressed by the Educational Policies Commission in a volume published in 1937 under the title *The Unique Function of Education in American Democracy*. It must be said, however, that neither the political scientists nor the educators were able to present any conclusive body of evidence in support of their respective positions. A recently published report of an investigation con-

ducted jointly by a professor of education and a professor of political science at the University of Chicago will not, in the minds of some, lift the issue out of the realm of opinion, but it does constitute the most extensive and conclusive investigation of the problem which has yet appeared. It is published under the title *Schools and City Government.* The study was initiated by Professor Leonard D. White, of the Department of Political Science, who directed the course of the study until his appointment to the United States Civil Service Commission. Thereafter, Professor Jerome G. Kerwin represented the Department of Political Science in the conduct of the investigation. Throughout the entire study the Department of Education was represented by Professor Nelson B. Henry.

The inquiry consisted in a field survey of thirty-three cities so selected that they represented practically every degree of relationship between city governments and school districts. The investigators visited each city for two or three days and held interviews "with school officials, with the secretaries and research assistants of bureaus of municipal research, with officers of civic agencies and taxpayers' associations, with city officials, and with many leading citizens who are informed concerning school and city relationships in their communities." No effort was made to compare school systems in terms of statistical data. The judgments of competent observers within the community were sought in the belief that these judgments provide a dependable measure of the value of existing practices and a serviceable guide to future policy with respect to school and municipal relations.

One of the most significant findings of the investigation relates to fiscal dependence and politics in the schools. It was found that political interference with the schools is just as likely to come from boards of education as from officials in the city government and that there is no particular pattern of relationship between the schools and municipal government which can be relied on to prevent politics in the schools.

The following paragraphs are quoted from the general conclusion of the study.

In conclusion it may be said that there is continuous and increasing co-operation between the cities and the schools. This tendency in itself might, after a

number of years, bring about a practical co-ordination of the organized efforts of the two corporations to provide an adequate program of public service for the communities which support them. At the same time, there is a strong sentiment in many quarters favoring a distinct separation of school and civil governments in urban centers. In the expression of this point of view, the peculiar functions of the school organization are emphasized and the common interests and responsibilities of the two governmental agencies are regarded as relatively unimportant. It is hoped that the examples of effective co-operation between school and municipal departments which have been presented in this report will stimulate greater interest in such co-operative procedures.

The chief obstacle to closer articulation of school and municipal functions is the common belief that the administration of municipal government in many American cities is naturally subject to the influence of organized partisan politics. It is feared that closer contacts between school and municipal authorities will lead to increased political influence in the management of the schools. The observations made in the course of this inquiry do not indicate that the schools are subjected to greater political pressure in those areas in which school and municipal services are administered co-operatively than in the situations in which the school authorities administer the same functions independently. On the other hand, the comments of both school and city authorities as well as those of other citizens interviewed in the cities visited support the view that co-operative endeavor on the part of school and municipal departments has improved the services of both organizations much more frequently than it has impaired the services of either. But general recognition of these facts is still obstructed by the prevailing impression that political machines exert too much influence upon the administration of municipal affairs.

Another reason advanced for separate control of city school systems is the fact that municipal policies are subject to change in the elective officers of the municipal administration. In contrast, it is noted that the terms of school-board members in the majority of American cities are staggered for the purpose of preventing abrupt changes in administrative policy. The argument is advanced that the essence of good budget-making and the essential factor in the development of an appropriate program of public education in an urban community is long-time planning and uninterrupted pursuit of the objectives desired. Frequent changes in administrative control may interfere with such development programs; and there are examples of changes in administrative plans of the school organization which are traceable to a change in the party or personnel in control of the municipal government. These examples are presented as argument against co-ordination of school and municipal enterprise. The much more common examples of disruption of well-conceived programs which have resulted from changes in personnel of school boards are completely disregarded. These interferences will continue in American cities until both municipal officers and school boards are convinced by the vigorous expression of public opinion that the administration of the school system is a professional

service which neither group of laymen is competent to perform. It could hardly be more difficult to institute this reform among municipal office-holders than among the school boards in the same communities. . . . .

There is, however, a widespread sentiment that the interest of the state in education calls for a special type or agency of control over the local school organization; and this sentiment has grown increasingly formidable in its support of the demand for "a constitution of self-government for education" as the states have repeatedly resorted to larger appropriations to school districts, whether these appropriations are made to create better educational advantages for the children, to equalize the burden of school support, or as a means of improving an inadequate tax system on which all local governments must rely for their support. Since all these motives are discernible in state aid for schools, it is not apparent that contributions by the state imply the necessity for any separate agency of control over school expenditures. . . . .

In support of the plan of increased co-ordination of school and municipal services, it can be said that it would result in the simplification of government machinery. The elimination of a great deal of duplication of service and reduction in the cost of these services would be possible results. It is altogether possible that it would bring improvement in the city government by causing the same watchful care of the city administration that is now exercised by many groups on behalf of the schools. It would increase the interest of the teachers in municipal government, an interest which in some cases has been unfortunately lacking. It would lead to a uniform personnel policy for all municipal public servants, which in turn might lead to greater professional interest and spirit among city employees. Finally, responsibility for the proper administration of the schools could be more easily placed upon one single authority. In the meantime, all possible encouragement should be given to the further development of co-operating procedures involving the schools and the departments of city government for the carrying-on of joint functions such as recreation and health programs or the services involved in purchasing and construction as well as a variety of other enterprises of common interest to both units of government.

A Guide to the Keeping of Cumulative Records

A bulletin of the United States Office of Education, entitled *Nature and Use of the Cumulative Record* (Bulletin No. 3, 1938), should prove valuable to school administrators and other officials concerned with the adjustment and guidance program of the school. The bulletin outlines the purposes for which the cumulative record may be employed, presents an analysis of correct practices in cumulative record keeping, and suggests ways of recording various types of items.

A New Occupational Information and Guidance Service

It is becoming increasingly clear that the youth problem, about which so much is being said these days, is in final analysis primarily a problem of finding work for young people. What youth want most of all are opportunities to earn a living, to win for themselves a degree of economic security, to be able to marry and establish homes, and to take their places as respectable and respected members of society. The most vulnerable point of attack on the youth problem is in the area of occupational adjustment. The young people of this country are sorely in need of a type of vocational guidance that relatively few, if any, school systems are able to provide. In at least half of the cities with populations of ten thousand or more, there are no guidance programs in the schools; and, even where vocational-guidance programs are in operation, effective guidance is difficult and often impossible because of a lack of adequate information with respect to occupational trends.

The impact of invention and technology on our economy has changed fundamentally the pattern of the worker's life. Perhaps the most characteristic feature of contemporary occupational life is the instability of employment opportunity. Within the span of a few years, century-old occupations and trades are reduced to minor importance or disappear altogether as new ones take their places. The wheelwright, the glass-blower, and the bookkeeper give place to the automobile mechanic, the factory operative, and the statistical clerk. Both the range and the quality of occupational opportunity are subject to sudden shifts because of such factors as advances in technology, changes in the consumption habits of the people, expansion or contraction of purchasing power, or fluctuations in prices and wages. The productive industries, including agriculture, mining, and manufacturing, provide opportunity for a decreasing percentage of the gainfully employed. There has been, on the other hand, a marked increase in occupational opportunity in transportation, communication, trade, the professions, the public service, domestic and personal service, and clerical work. In general, the trend has been from productive to distributive and service occupations. Within certain occupations there are clearly dis-

cernible shifts in the skills and technical training required of the worker. Personal and social relationships, moreover, are assuming greater importance for an increasing percentage of the gainfully employed. The great majority of the entrants into occupational life today must possess qualities of adaptability and adjustment, must know how to do not one but many things, must be able to transfer from one job to another, must be capable of sustained attention and quick reaction, must be more intelligent, and must be able to get along with people, to work with them, to direct them, and to serve their needs. It is obvious that any well-planned program that looks toward a more adequate adjustment of the population to occupational opportunities must be based on careful and detailed analysis of occupational trends and of the changing demands that the various occupations are making upon the skill, the intelligence, and the social qualities of the worker.

School people generally, and those concerned with vocational guidance in particular, will be interested in the publications of a new organization known as Science Research Associates. This organization announces a vocational advisory system with a seven-point program, which includes a number of publications and certain special services for members. The first publication in the series is a semimonthly magazine of occupational facts and forecasts which appears under the title *Vocational Trends*. This magazine will undertake to provide up-to-date information with respect to changing job opportunities and occupational developments. Special monographs outlining basic characteristics and trends in important industries, trades, or professions will be published at regular intervals. Another publication, bearing the title *Vocational Guide*, will serve as an index to current occupational information in books, magazines, special reports, pamphlets, and research studies. A reprint service will make available inaccessible but significant materials which are published in technical journals or reports not available in many libraries. A speakers' bureau will be maintained, through which members of the staff will be available for lectures and platform appearances.

Science Research Associates has headquarters at 600 South Michigan Avenue, Chicago, Illinois. The program announced is an

ambitious one, and, if the organization is successful in accomplishing its announced purposes, it will render a distinct service to American education.

The Occupational Outlook for Elementary-School Teachers

The following statement is quoted from the December number of *Vocational Trends*, the new magazine to which reference was made in the preceding news item.

Education is big business in the United States. It is a three-billion-dollar-a-year industry, employing the time of a quarter of America's people.

For 150 years, through good times and bad, youngsters have come rolling off academic assembly lines in ever increasing numbers. The schools have faced curtailed budgets, but they have never known a real depression.

Today, for the first time in their history, a serious crisis is approaching. Like many another industry, education is now facing a shortage of raw material. Schoolrooms that used to be chronically overcrowded now have empty desks.

In the city of Chicago, for example, there are actually fewer children in the first grade now than there were in 1900, although the city has since doubled in size. Throughout the country as a whole, there will be over a million fewer children of elementary-school age in 1940 than there were in 1930. More students were graduated from the elementary schools in 1935 than ever before or ever will be again.

If money were no object, most teachers would consider the decreasing size of their classes a thoroughly desirable trend. For nearly thirty years the average number of children per teacher has been increasing steadily, reaching its peak in 1934 when each instructor cared for an average of fifty students. Although it has declined somewhat since, most elementary-school teachers still have more pupils than they can handle adequately.

Instead of being pleased, however, many teachers look askance at these declining attendance figures. School boards, they fear, may interpret these smaller figures to mean a need for fewer teachers also. Already there are nearly forty thousand fewer elementary-school teachers employed than there were in 1930, although the number is considerably higher than it was at the bottom of the depression.

About six hundred thousand men and women now make their living teaching in grammar schools, and this fall there were about one hundred thousand vacancies to fill. Many of these openings occurred, however, from experienced teachers transferring from one job to another, so that the actual openings for newcomers were considerably less than this total.

These facts indicate a need for a thorough revision of teacher-training pro-

grams in the normal schools and teachers' colleges throughout the country. Many of these have been and still are geared to a constantly increasing market for their graduates. That market no longer exists.

If a market analyst were reviewing the situation, he might summarize it in this manner: If the teacher-pupil ratio remains at the level it has averaged in recent years, the demand for elementary-school teachers will drop sharply during the next ten years, after which it will level out as the birth-rate reaches a plateau also. What seems more likely, however, is that the size of classes will gradually grow smaller, which will slow up the decline in teacher demand. The ideal ratio would be about fifteen students to each teacher. But in view of the fact that the ratio is now over forty to one, such a large decrease is too much to hope for, at least immediately. In any case, it is unlikely that the total number of grade-school teachers will increase in the future, except possibly during the next year or two when extreme curtailments caused by the depression are modified. Teacher-training organizations need to modify their output in light of these changing conditions, and school boards should be extremely careful about expanding their present facilities.

These changes will not occur at the same time in all sections of the country. They will come first in areas where the birth-rate is lowest, generally sooner in city regions than in rural areas, and earlier in the West and North than in the South.

Women will have a harder time getting these teaching jobs in the future than men. Men are replacing women in many schools. In fact, the opportunities for men in grammar-school fields are increasing.

The opportunities also vary considerably according to the subject in which teachers are trained. There is generally an oversupply of teachers trained in the standard subjects, whereas in a few of the new fields, such as vocational training, agricultural subjects, and remedial reading, the opportunities are excellent.

Growth in Membership of the American Federation of Teachers

During the past two years membership in the American Federation of Teachers has shown a marked increase. Irvin B. Kuenzli, secretary-treasurer of the federation, states in a recent issue of the *American Teacher* that membership has doubled within the past two years. In June, 1938, the total paid-up membership was 30,130, which represented a gain of 8,127 members over the preceding year. During the fiscal year ending in May, 1938, sixty-three locals were chartered. Membership is largely concentrated in the area north of the Mason-Dixon line and between New England and the Mississippi River. Approximately 64 per cent of the member-

ship is confined to the states of Illinois, New York, and Ohio. Minnesota, Georgia, and Pennsylvania account for another 16 per cent of the membership. These six states now provide 80 per cent of the total membership.

Here and There among the Schools

Items selected for reporting in this issue of the *Elementary School Journal* relate to the teaching of phonics and speech correction, a comprehensive program for the teaching of the social sciences, an experiment in mental hygiene, methods of informing the teaching personnel and the public generally of the policies and work of the schools, and plans for the effective use of professional magazines by the teachers of a city school system.

Guide to the teaching of phonics and speech correction in an Ohio county

From Charles S. Harkness, superintendent of schools, of Wood County, Ohio, we have received an unusually interesting document of some one hundred mimeographed pages which carries the title "A Study of Phonics and Speech Correction for the Wood County Schools." It presents the results of a co-operative undertaking, on the part of teachers and local school administrators, to prepare outlines for the teaching of phonics and speech correction in the elementary grades. The first fifty pages deal with phonics, the materials being organized under such topics as the following: "Principles Underlying Instruction in Phonics," "Objectives for the Teaching of Phonics," "Activities Connected with Phonic Instruction," "Methods of Procedure for the Teaching of Phonics," "Outcomes in the Teaching of Phonics," "Games for the Teaching of Phonics," "Seatwork for Phonic Instruction," and "Poems for the Teaching of Phonics." The second part of the study is entitled "A Study of Speech Correction." In this part the topics selected for treatment are: "Principles Underlying the Teaching of Speech Correction," "The Voice and Speech Mechanism," "Speech Disorders," "Objectives for Speech Correction," "Activities for the Teaching of Speech Correction," "Methods of Procedures," "Outcomes from the Teaching of Speech

Correction," and "Choral Speaking and Speech Correction." Attention is also given to games, seatwork, and poems which may be employed in the correction of speech.

A program for teaching social studies in all grades For the past five years the Social Studies Committee of the Seattle Public Schools has been undertaking a thorough and comprehensive reorganization of the entire program of the social studies in the schools of that city. Four books for the use of pupils have been prepared under the guidance of the committee, and numerous detailed mimeographed courses have been made available for teachers. The essential elements of the program, as worked out to date, are presented in a new social-studies syllabus entitled *Living Today—Learning for Tomorrow*. The following comment appears in the *Seattle Educational Bulletin*.

> An understanding of our social organization and institutions on the part of the pupil, a sense of belonging, and an appreciation of his own social responsibility are fundamentals underlying the new course, *Living Today—Learning for Tomorrow*, prepared by the Social Studies Committee under the leadership of Mary E. Knight. Flexibility of treatment has been provided for throughout. Interrelation of subject-matter areas without a breaking-down of boundaries is encouraged. The way is pointed out for utilization of language arts, music, physical education, and other fields for the deepening of understanding and heightening of appreciation.
>
> This new book explains the organization of all the social studies, outlining semester content areas, time allotments, materials of instruction, reasons for the semester's work, and desired outcomes. With it will be used the detailed mimeographed courses which are constantly being brought up to date.
>
> The publication of this streamlined, illustrated syllabus culminates five years of work by the Social Studies Committee and its subcommittees. During that period a careful progression from the familiar to the distant—both in time and in place—was worked out, new materials were evaluated and selected, new mimeographed courses from kindergarten through high school were prepared, and the essential elements of the whole presented in *Living Today—Learning for Tomorrow*.

The content of the syllabus is clearly organized and attractively presented. The material for each grade is organized under the following topics: "Content Areas," "Approximate Time Allotments," "Reasons for Semester's Work," "Materials of Instruction," and "Desired Outcomes."

Early report on long-time project in mental hygiene

Lincoln D. Lynch, superintendent of schools at Norwood, Massachusetts, and the school authorities of that community are co-operating with the Massachusetts Society for Mental Hygiene in a project of unusual significance. The project is under the general direction of a group of specialists who are members of the staff of the Massachusetts Society for Mental Hygiene. Continuous study will be made of all the children in four first-grade classes, at least a hundred, who entered Grade I in the autumn of 1937. The project has been under way for a year. Although therapeutic measures are frequently employed, the project is primarily a research one. The general purpose of the undertaking and some of the conclusions arrived at to date are described in some detail in the October, 1938, issue of *Understanding the Child*. The editor comments as follows on the major objective of the project:

> The project itself has a number of objectives, the most important of which is the testing-out in our public schools of the practical value of the mental-hygiene concept of the "total child in the total situation." In other words, can a practical hygienic system be established in our public schools with this idea as a guiding principle? At the present time a great deal of the work done in our public schools for the adjustment of the individual child, if any such work is done at all, is divided among a number of divisions or departments, each operating independently of the others, with no integrated approach to the individual child. This practice in itself violates the concept enunciated above.

A manual on principles and policies operative in a local school system

Charles J. Dalthorp, superintendent of schools in Aberdeen, South Dakota, has prepared a manual of 166 pages which describes in great detail the policies, the guiding principles, and the regulations of the Aberdeen school system. The manual is designed "to enlighten the patrons, to unify the efforts of all departments and units of the system, and to serve as a handbook for administrators, teachers, and other employees." It covers practically every aspect of the work of the schools, for example, the administration and staff of the schools; the elementary schools; the junior and senior high schools; the program of physical education; the speech, music, and health programs; teachers' organizations; and the program of practice teaching.

Public-relations program in schools of Charleston Superintendent Virgil L. Flinn, of Charleston, West Virginia, has prepared an extensive bulletin entitled "Kanawha County School Catechism." The bulletin was prepared with the view of acquainting the administrative, supervisory, teaching, coordinating, and maintenance personnel, as well as parents and pupils, with the operation of the county school system. Attention is given to such matters as the physical plant, the teaching personnel, enrolment, finance, curriculums, supervision, health service, innovations and accomplishments, and present needs.

The effective use of the professional magazines in a city school system From the "Seattle Principals' Exchange," a mimeographed bulletin designed as a medium of keeping principals informed with respect to school affairs in the city, we quote the following description of plans employed by school principals to insure the most effective use of professional magazines.

In one school the principal looks at the magazines as they come, makes note of valuable articles and calls them to the teachers' attention at noon. They are read and returned to a rack in the teachers' room. A committee keeps the rack in order. Old magazines are filed in a closet.

Another principal pastes a label on each cover and writes the room numbers on the label. Teachers read and check their numbers. One magazine is reserved for certain grades where it is most used. If there are articles of interest to other teachers, that number is sent to them. Sometimes the principal calls the attention of individual teachers to articles especially valuable.

In another office the magazines are put on a shelf in a case. The clerk types a list of the magazines and teachers' initials after the number they take out and check upon returning them. . . . .

In another school the teacher in charge arranges the magazines on a table in the teachers' room. She puts pockets on the covers and keeps track of the circulation. At the end of the year each volume is assembled and filed in a cabinet.

In one building the teacher in charge sends by pupil messenger each magazine to the teacher who will be interested. The messenger collects after three days.

The best method for any building depends somewhat upon the size of the school and the facilities at hand. In any system the following are important: display of magazines, a method of getting the magazines into the hands of the teachers that are or should be interested, a return route, and filing for reference. Naturally the second and third are the most important features of a system. It is recommended that a teacher be placed in charge and that the principal, also, see the magazines.

Who's Who for December

The authors of articles in the current issue F. M. Garver, professor of elementary education at the University of Pennsylvania. William C. Kvaraceus, educational consultant of the public schools in Brockton, Massachusetts. Marion E. Wiles, supervisor of the primary grades in Brockton, Massachusetts. Earle Connette, professor of music and head of the Department of Fine Arts in the New Mexico State Teachers College, Silver City, New Mexico. William A. Miller, principal of Butler School, Springfield, Illinois. George Spache, psychologist at Friends Seminary and Brooklyn Friends School, New York City. William S. Gray, professor of education at the University of Chicago.

The writers of reviews in the current issue Henry J. Otto, consultant in education of the W. K. Kellogg Foundation, Battle Creek, Michigan. A. H. Turney, associate professor of education at the University of Kansas. Robert A. Davis, professor of education at the University of Colorado. Kai Jensen, associate professor of education at the University of Wisconsin. D. S. Brainard, professor of history at State Teachers College, St. Cloud, Minnesota. Evangeline Colburn, teacher-librarian in the University Elementary School of the University of Chicago. Edna McGuire Boyd, formerly elementary-school supervisor at East Chicago, Indiana. Roy Ivan Johnson, director of the Division of Skills and Techniques at Stephens College, Columbia, Missouri.

CURRICULUM REORGANIZATION ACCORDING TO THE PHILADELPHIA SCHOOL SURVEY

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THE report of the Philadelphia Public School Survey, published in September of last year, advocates a three-curriculum plan for the elementary schools and certain modifications in the curricular offerings in the high schools. Perhaps the most challenging feature of the plan outlined for curricular reorganization is a curriculum for dull-normal children beginning at about Grade IV and extending as a single differentiated curriculum through Grade XII. Another feature worthy of note is a recommended curriculum in the elementary school for the intellectually superior pupil.

In making this recommendation, the survey staff was influenced by several factors. In the first place, recent annual reports made by the Division of Educational Research and Results of the School District of Philadelphia indicated an extremely wide spread in pupil abilities in both elementary and high school in spite of the fact that over 4 per cent of the total school enrolment in the city is found in special classes. Philadelphia has the largest special-class enrolment of any city in the United States. The median intelligence quotient of the special class enrolments in 1936–37 was 76.1. In other words, a rather large number of low-ability pupils are segregated in special classes, yet the report of the Division of Research for May 15, 1936, showed that 20.9 per cent of the sixth-grade pupils in the regular classes and 15.8 per cent of the ninth-grade pupils had intelligence quotients of 89 or less. The same report indicated that 16.9 per cent of the sixth-grade pupils and 13.6 per cent of the ninth-grade pupils had intelligence quotients of 120 or more. Obviously a single curriculum in the elementary school cannot provide adequately for the needs of pupils as far apart in mental abilities as these extremes indicate, nor can the dull-normal profit to the extent possible and

desirable in the traditional curriculums provided in the Philadelphia public secondary schools.

A second factor requiring consideration was the fact that the 1937 session of the state legislature amended the compulsory-attendance law so that beginning in September, 1939, all pupils must be in regular attendance at the sessions of day schools until sixteen years of age and, unless gainfully employed according to provisions of the law, until eighteen years of age. The result of this law is that school districts of Pennsylvania must make immediate provisions for twelve years of schooling for practically *all* pupils of each district until they are eighteen years of age, since few children of sixteen to eighteen years are likely to be absorbed by industry in the immediate future. The economic depression of the past several years is partly responsible for the greatly increased annual rate of high-school enrolment that now prevails without the aid of more stringent compulsory-attendance laws. Probably many of the pupils whom the amended compulsory-attendance law will bring into the secondary schools will be those least qualified to profit by the curricular offerings now provided.

Finally, cognizance was given to the fact, which for more than a score of years has been apparent to most school administrators and supervisors of instruction, that a single curriculum in the elementary school did not, and probably could not, make adequate provisions for the varying needs and capacities of pupils. Since nearly 100 per cent of the pupils were compelled by law to attend, the differences between the upper fifth and the lower fifth of the enrolment were bound to be enormous. Various attempts have been made in the past to provide for these recognized differences, either by permitting the curriculum to be completed at varying rates or by varying the content and maintaining a constant period of time for completion. None of these plans had been generally adopted. They either added to the cost of administration or were ineffectual because of the assumption that there is an essential body of content which all pupils must learn regardless of capacities and of individual needs.

A large city school system, including many elementary schools enrolling 750 or more pupils, could administer a three-curriculum plan in the elementary schools without adding in any way to the

cost of administration. The median elementary school in Philadelphia has twenty-one class sections in Grades I–VI, inclusive, with a regular teacher in charge of each. Departmental organization does not prevail in these grades. Half or more of the schools could, therefore, put into operation a three-curriculum plan with only minor adjustments, without disturbing the general administrative features of the school to any extent. A school with an enrolment of nine hundred or more could have pupils enough at each grade level for full-size classes in each of three curriculums.

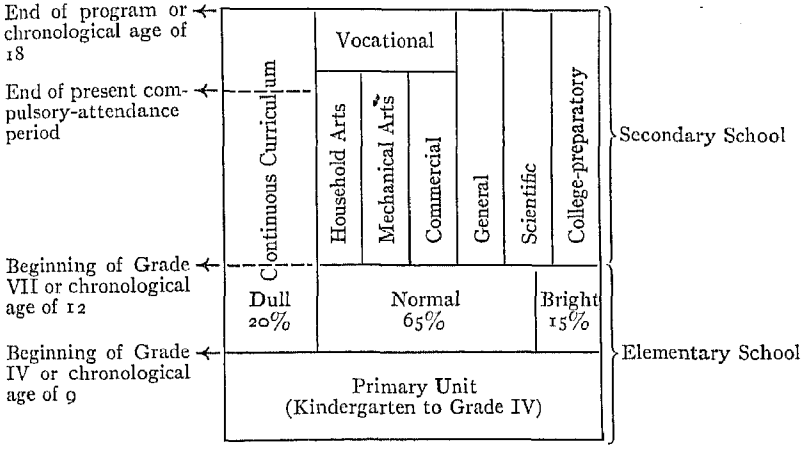

FIG. 1.—Plan of progress through school of dull, normal, and bright pupils

The plan recommended in the survey report provides for three time units in a twelve-year program of public education. The first three years (four years if kindergarten is included) is to be known as the "primary unit," the next three years as the "middle-period unit," and the last six as the "secondary-school unit." The plan in outline is shown in Figure 1.

An important feature of the plan is that the chronological age of the child is the sole criterion for advancement through any curriculum. A child entering the primary unit in the kindergarten at the age of five or as a first-grade pupil of six would remain in this section of the program until he is nine years of age regardless of his native capacities. At nine or thereabouts, depending on his chronological

age at the time of school entrance, he would be placed in one of the three curriculums provided. If he had an intelligence quotient of about 120 or better, he would be placed in the curriculum for bright children. If his intelligence quotient was 89 or less, he would possibly be placed in the curriculum for the dull-normal children. If his intelligence quotient was between 89 and 120, he would probably be placed in the curriculum for normal children. At twelve years of age he would enter the secondary school, eventually being classified into that curriculum most nearly suited to his needs and to his capacities for doing the work required. If he had been in the elementary-school curriculum for the bright, he would probably enter one of the high-school curriculums leading to college entrance. If he had been in the curriculum for the dull-normal, he would probably continue in that curriculum throughout the secondary-school period. Pupils from the curriculum for the normal children would be placed in any of the secondary-school curriculums that seemed to provide adequately for their needs and capacities. All would finish the course in twelve years or at about the age of eighteen. There would be no laggards to be re-educated at any grade level, and consequently there would be a reduction in financial and educational wastes.

In the primary unit the curriculum is not differentiated as to content for two reasons. In the first place, during these early years, even in the traditional curriculum, much freedom is usually accorded the teacher in choice of materials and of methodology in order that she may provide adequately for individual differences. Learning to read seems to be the severest test of intellectual capacity to which children are subjected during the first three years in school, and it takes some time to determine a child's ability to manage the printed page. In the second place, this unit is a period for the careful evaluation of the native abilities, aptitudes, and intellectual limitations of each child. On the basis of this three-year period (four-year if he enters at the age of five) of careful observation and evaluation, he is placed in the appropriate curriculum at nine years of age.

Attention should be called to the fact that this plan is not a scheme for classifying children into homogeneous groups on the basis of mental abilities. Nevertheless, the children in each curriculum will

be more nearly homogeneous than is usually the case even in homogeneous-grouping plans, because, for one thing, all will be of about the same chronological ages and probably of about the same social ages in addition to being more nearly alike in mental ages. The important thing to keep in mind, however, is that each child is placed in a curriculum constructed from the root up to meet, as nearly as it is humanly possible to do so, the needs of children of his supposed type.

Each curriculum must be formulated for the kind of children for whom it is intended regardless of the contents of the curriculums which are being constructed for the other two groups of children. Any attempt to take a traditional elementary-school curriculum and modify it by what is frequently called "enrichment" for the bright children, and to strip it down to what is assumed to be the minimum essentials for the duller children, will defeat the purposes of the whole plan. For each group of pupils there are minimum essentials, but in all probability they are distinctly different from one another. Each curriculum must be worked out on the basis of the nature and the needs of a particular type of child so far as children can be classified into types. Probably all will agree that there are easily observable differences between the dull and the bright. It is practically impossible to determine differences between the lowest portion of the normal group and the highest portion of the dull group, or between the highest portion of the normal group and the lowest portion of the bright group. Borderline cases at either end of the normal group will not be badly misplaced in either of the two adjacent curriculums. In any event it should be possible to reclassify a pupil as soon as it is definitely determined that his needs would be better cared for in another curriculum.

In the construction of a curriculum for the dull-normal group of children, making up at present about 20 per cent of the elementary-school population of Philadelphia, recourse should be had to all the scientific studies and experiments that are available. Much is now known concerning the rates and the qualities of the learnings of such children so far as these pertain to the academic content of the traditional elementary-school curriculum. Studies of unemployment and of indigence seem to indicate that the lower economic and social

levels of adult society are made up predominantly of persons who as school children would undoubtedly have been classified as dull-normals. Properly educated through a twelve-year program adapted particularly to their interests, capacities, and probable placement in adult society, such persons would lead happier and more useful lives as children and become a more stable factor as adults, particularly in economic and social upheavals, which seem to afflict modern civilizations periodically.

The bright have never had an adequate opportunity in the American scheme of public education. If they were educated according to their endowments for the public good, there is the strong probability that this nation would never want for adequate and wise leadership in the various fields of human activity.

If Philadelphia accepts this or a similar plan of curriculum reorganization for its public schools, certain administrative difficulties should be anticipated. In the first place, the plan should be tried out for a few years in the larger elementary schools only, where there are likely to be enough pupils of each chronological age of the different mental levels to make full-size classes in each of the three curriculums. If, however, it is found that there are not enough pupils of the same age to make up a class in either the curriculum for the dull or for the bright, or for both, one of two things can be done. For that matter, both can be done without serious consequences. Enough borderline cases can be taken from the normal curriculum to make up a class, or a given teacher can have a class in either curriculum made up of pupils of varying chronological ages. The spread in chronological ages cannot be more than two years in any case, while, in the traditional curriculum in effect in city schools, the spread in the middle grades is often as much as five years and in educational ages sometimes as much. Modern methods of instruction require the teacher to separate her class into two or more groups according to their needs. With three levels of chronological ages under the proposed plan, only three groups would need to be maintained.

From the time they enter school until they are about twelve years of age, all three groups of children should be housed in elementary-school buildings and thereafter in junior and senior high school buildings. Subnormal children are not provided for in this plan.

These should be cared for in segregated special schools or special classes in regular elementary schools.

Besides housing all three groups of normal children in the same buildings, each curriculum should provide many possibilities for the intermingling of the groups in school activities, as contrasted to classroom activities. Educational thinkers are coming to realize that some of the most valuable opportunities for education are not utilized in the time-honored practice of using the classroom as the sole locus for stimulating the learning processes. If a third or more of a pupil's time in school were spent in activities involving large portions of the entire enrolment, he would probably get a better and a more practical training for adult citizenship than the pupils now do. Furthermore, this intermingling of pupils from the various curriculums in the same buildings would practically eliminate tendencies to become class conscious which might result from complete segregation in differentiated curriculums.

AN EXPERIMENT IN GROUPING FOR EFFECTIVE LEARNING

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IN FEBRUARY, 1937, a city-wide testing program, in which the Metropolitan Achievement Tests, Primary II, Battery A, were administered to the second-grade pupils in Brockton, revealed that one of the larger elementary schools showed exceptionally low educational achievement, in fact, the lowest in the city. The median grade score for this school was 1.9, compared with a median of 2.5 for the city at large.

During the remainder of the school year many effective learning devices were used to help the children in this school improve in various skills. However, as the whole situation was reviewed at the reopening of school in September, 1937, it appeared that still another means could be used to facilitate instruction for these low groups. Attention, therefore, was centered on more effective grouping of pupils.

Hitherto the second-grade pupils in this school had been sectioned into three classes heterogeneous as to mental age, chronological age, achievement, and social background. It was decided to alter this type of grouping for the following reasons: (1) With a wide range of ability and achievement in a room, it was impossible to give the necessary amount and type of effective guidance to each ability and achievement level. (2) Too often teachers divided pupils within each room into X, Y, and Z groups, keeping the same grouping for all subjects in spite of the fact that a child who finds reading difficult may find quantitative thinking easy. (3) Whenever special learning materials were bought, they had to be duplicated for three rooms if the school administration was to be fair to all pupils. (4) It was felt that the remedial work begun in Grade II would be continued most effectively if each teacher could center attention on one achievement

level for each skill rather than planning content and methods for all levels. (5) No two teachers showed the same ability to guide learnings in the same subject-matter fields.

The following plan was formulated and set into operation:

On the basis of the records on the Metropolitan Achievement Tests, plus the judgments of second-grade teachers, the promoted pupils were classified into Groups X, Y, and Z according to their achievement and apparent abilities to cope with three separate subject-matter fields: reading, English (including language and spelling), and arithmetic. Of the group of seventy-five pupils, thirty-eight were in the same group in the three subjects. Of these, twenty pupils, with intelligence quotients ranging from 90 to 140 on the Detroit Primary Intelligence Test, were in Group X in all three subjects; ten pupils, with intelligence quotients ranging from 82 to 102, were in Group Y; and eight pupils, with intelligence quotients ranging from 69 to 99, were in Group Z. Thirty-five pupils were in two different groups, and two pupils were in three.

After the morning devotional period the school day was divided into four major periods in terms of subject-matter fields. These four periods had to do with arithmetic experiences, reading activities, English activities, and social studies and art experiences. The responsibility of each of the three third-grade teachers was to guide learnings in all the subjects but to plan work for only one achievement level in each tool subject. Through group conferences the same centers of interest, which formed the core of the school living, were adopted for all the rooms. Since these "units of activity" were rich in social content, they were to be developed largely during the social-studies period. During this time the pupils were to be grouped heterogeneously, as during the opening period in the morning. For each of the other blocks of activity each teacher was to work with as homogeneous a group as possible but with a different ability and achievement level in each period. For instance, Miss B. might work with a Group Z in arithmetic, a Group Y in reading, and a Group X in English. At the same time, a child who was in Group Z in arithmetic might be found in Group X or Y during other periods. Each child was to be given a simple program slip showing where he was to go for each period. Detailed plans for remedial activities and en-

riched programs were worked out with each teacher. With the wholehearted approval of Superintendent John L. Miller; of the district principal, Edmund K. Tanning; the school principal, Catherine Shortall; and the teachers, Hazel Bond, Mary Byrne, and

TABLE 1

GRADE SCORES ON GATES PRIMARY READING TEST, TYPES 1, 2 AND 3, MADE BY PUPILS IN GROUP Z IN READING ACHIEVEMENT

Pupil	Mental Age (in Years and Months)	Intelligence Quotient on Detroit Primary Test	Reading Grade		
			September 23, 1937	May 26, 1938	Gain
1	7- 5	86	1.96	3.56	1.60
2	7- 5	94	2.03	3.34	1.31
3	7- 9	84	2.19	3.49*	1.30
4	7- 6	85	2.20	3.45*	1.25
5	7- 7	95	2.10	3.34	1.24
6	6- 6	78	2.15	3.34	1.19
7	8- 6	97	2.42	3.58*	1.16
8	7- 6	94	2.38	3.53*	1.15
9	7- 7	77	2.21	3.34	1.13
10	7- 3	89	1.64	2.76	1.12
11	6- 5	73	2.06	3.01	.95
12	8- 0	100	2.41	3.28	.87
13	7- 0	83	2.70	3.46*	.76
14	7- 8	99	2.58	3.25*	.67
15	7-11	68	1.85	2.52	.67
16	7- 1	86	1.94	2.57	.63
17	8- 0	91	2.73	3.30	.57
18	8- 5	103	2.93	3.44*	.51
19	7- 5	81	1.40	1.85	.45
20	7- 8	69	3.02	3.39	0.37
Average	7- 6	87	2.25	3.19	0.94
Median	7- 7	86	2.20	3.34	1.04

* On one section of the test the ceiling was reached.

Ruth Bryant, the grouping experiment was launched in the autumn of 1937.

For a more complete diagnostic view of the achievement of Group Z in reading, the Gates Primary Reading Test, Types 1, 2, and 3, was administered in the autumn of 1937. Another form of the same test was administered in May, 1938, before the close of the school year. Table 1 shows grade scores for these two testing periods. In

spite of the low intelligence quotients, the results of the remedial program were gratifying.

In the autumn of 1937 added objective data were obtained from the Pressey Attainment Scales, administered to all third-grade pupils in the city. Although these results again placed the entire group of seventy-five experimental pupils in the lowest position, as had the previous February scores, an upsweep tendency was definitely indicated.

On a retesting of achievement at the close of the school year 1937–38, although no special stress had been placed on the learning other than the grouping factor, Grade III in the experimental school rose from the lowest position in the city to fifth from the bottom. The median of this class on the Pressey Attainment Scales was 47 compared with the national norm of 49 and with a median of 54.8 for the city as a whole.

CONCLUSIONS

1. With respect to academic achievement, the objective data indicate that more than the average amount of pupil growth was made in the course of the year.

2. Because of the nine possible groups, the learner was more often met at his own ability and achievement level in *each* subject than by any other method known to the writers. At the same time, the many values of heterogeneous grouping were not lost, since this arrangement was used during the opening period of the school day and during the period devoted to social studies and art. The long periods allotted to each subject-matter field proved advantageous in the learning experiences.

3. The grouping provided greater opportunity to guide the abler pupils to reach their potentialities and to plan a rich remedial program for the Z groups.

4. Since each teacher worked with all three achievement levels during the school day, she was better able to keep her perspective of proper standards.

5. Departmentalization was avoided because each teacher guided learnings in all subject fields.

6. Wider social relationships were possible for both teachers and pupils.

7. Disciplinary problems were reduced. It was felt that the noticeable decrease was due in part to the altered social environment of each period.

8. The experiment afforded many more opportunities than does the usual arrangement to develop social habits, such as assuming responsibility for materials and being punctual.

9. Report-card marks tended to be more fair since they were the co-operative results of the thinking of three teachers.

As the year's experimental activity is summarized, it is only fair to point out certain practical difficulties which were met by the classroom teachers. (1) In the attempt to maintain proper relations between the skill subjects and the core experiences, a number of difficulties arose. (2) During the initial stages of the experiment the adjustments of the pupils to a complex school organization caused some confusion, with attending loss of time. (3) The more immature pupils experienced some difficulty in keeping track of their personal belongings.

While it may be granted that these few limitations exist, their nature and number are such that with careful planning their effects can be reduced to a minimum. On the other hand, the numerous and significant values of this experimental grouping decidedly eclipsed the handicaps.

BIBLIOGRAPHY IN MUSIC EDUCATION FOR CLASSROOM TEACHERS

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THE purpose of this bibliography is to provide classroom teachers in rural and small-town schools with an eclectic set of references that will assist them in teaching music in their rooms. The bibliography has the unusual advantage of coming from a single source, the yearbooks of the Music Educators National Conference. Since the founding of this organization in 1907, a volume has appeared each year devoted to the papers, addresses, and discussions that have been given in the yearly meetings. Without doubt these volumes contain the outstanding contributions in the field of music education. In this bibliography only those volumes issued since 1929 are used. These are commonly found in college, university, and public libraries and are, therefore, likely to be available to most elementary-school teachers.

There has always been controversy whether the classroom teacher should teach the music in his room. Although it is not the purpose of this article to determine whether the music should be taught by the specialist or by the classroom teacher, it seems pertinent to say that classroom teachers have been, and are, teaching music successfully in schools, both with and without supervision. The classroom teacher cannot be expected to be a virtuoso, but many supervisors and college instructors will readily concede that, with the broadening concept of the place and function of music education in the lives of boys and girls, the classroom teacher can teach music successfully if he is an intelligent lover of music and has a genuine interest in music as a dynamic educational force.

The bibliography has been selected in light of the writer's experience in teaching potential classroom teachers to teach music and in light of his work with classroom teachers who have taught music

under his supervision. The bibliography is not intended to supplant those essentials which one who endeavors to teach music must know. It will, however, supplement and assist teachers who wish to give efficient and successful instruction in music. The classroom teacher should be familiar with the fundamentals of music, should be able to sing agreeably and in tune, and perhaps should know how to play simple accompaniments on the piano, although piano accompaniment is not absolutely necessary and is sometimes impossible in rural one-room schools because no instrument is available. The writer has found that many classroom teachers are successful in teaching music where specialists have failed. It seems that the teacher's general understanding of boys and girls compensates somewhat for lack of extensive knowledge and training, especially for much of the preparation which the specialist must have.

In this bibliography there are numerous references under the heading "Problems of Teaching Music in Rural Schools." Because music teachers and supervisors have considered that classroom problems are particularly noticeable in schools without "special" teachers or without supervision, much has been said on behalf of the rural one-room teacher and his work in music that is valuable to classroom teachers in town schools even though they be employed in graded systems. It seems that the nonspecialist point of view is brought out more emphatically in the consideration of rural schools.

In addition to the references in the bibliography, the classroom teacher will find much assistance in the books listed below.

DYKEMA, PETER W. "Music in the Intermediate Grades," *The Classroom Teacher*, VII, 397–560. Chicago: Classroom Teacher, Inc., 1927–28.

GEHRKENS, KARL W. *Music in the Grade Schools.* Boston: C. C. Birchard & Co., 1934.

KERN, MARY ROOT. "Primary Music," *The Classroom Teacher*, IV, 179–308. Chicago: Classroom Teacher, Inc., 1927–28.

MCCONATHY, OSBOURNE, and OTHERS. *Music in Rural Education.* New York: Silver Burdett Co., 1937 (revised).

PERHAM, BEATRICE. *Music in the New School.* Chicago: Neil A. Kjos Music Co., 1937.

PERKINS, CLELLA LESTER. *How To Teach Music to Children.* Chicago: Hall & McCreary Co., 1936.

In the references which follow, the date given after the title of the article refers to the yearbook in which it appears. These yearbooks

may be obtained from the Music Educators National Conference, 64 East Jackson Boulevard, Chicago, Illinois, by nonmembers at $2.50 each.

MUSIC IN EDUCATION AND LIFE—ITS PHILOSOPHY, PLACE AND FUNCTION IN AMERICAN SCHOOLS

The primary purpose of music education is to develop a genuine love of good music. Musical amateurism may be considered the result of music education. As a direct outgrowth of a consistent educational plan, boys and girls are given a vehicle for emotional expression. The ends desired in music education can be effected only by a sequential presentation of musical experiences that will result in the maximum enjoyment of music. Such enjoyment, in its highest conception, necessitates an increasing awareness, interest, and insight regarding music. The music program in the public schools should be an organized opportunity for social experience, and in the concerted music class are found excellent opportunities for social growth and development. Although music education exists primarily to provide a vehicle of universal emotional expression, some technical mastery and some knowledge of content are necessary. The greatest enjoyment and the highest fulfilment of music education occur when there is actual participation in the production of beautiful music, whether it be simple tunes or complex masterpieces.

ANDERSON, HOMER W. "Music's Place in Public Education," 1937, pp. 11–14.
CADMAN, S. PARKES. "Music as an Educational Force," 1936, pp. 19–20.
FOWLES, ERNEST. "Music and Life," 1932, pp. 21–26.
GREEN, THEODORE FRANCIS. "Music in Everyday Life," 1933, pp. 12–13.
GRIGGS, EDWARD HOWARD. "Music and American Culture," 1930, pp. 40–50.
MCCARTHY, LORENZO C. "The Arts in the Educational Process," 1933, pp. 35–36.
MURSELL, JAMES L. "We Need Music," 1932, pp. 15–20.
PRATT, ORVILLE C. "What Can Music Contribute to the Curriculum of the Modern School?" 1931, pp. 234–36.
"Present-Day Problems in Music Education, Summary of Group Discussions, North Central Conference, 1935," 1935, pp. 108–18.
RUGG, HAROLD. "Musical Education and the Development of Personality," 1930, pp. 32–38.
SAMUELSON, AGNES. "The Place of Music in Education," 1936, pp. 26–33.
SMITH, HENRY LESTER. "The Role of Music in a Changing Society," 1935, p. 42.
STRINGHAM, E. J. "A Balanced Program for Music Education," 1930, pp. 206–14.

VAN DE WALL, WILLEM. "The Use of Music as an Educational Stabilizer," 1936, pp. 52–55.

WILKINS, ERNEST H. "Social Betterment through Art," 1934, pp. 18–22.

WILSON, GRACE V. "Aims and Objectives in Music Education," 1931, pp. 322–28.

WRIGHT, FRANK W. "The Better Realization of Educational Objectives through Better Teaching of Music," 1929, pp. 205–14.

WRIGHT, FRANK W. "School Music and the Public," 1935, pp. 49–53.

CLASSROOM PROBLEMS OF MUSIC EDUCATION

Once the teacher is actively engaged in the teaching act, the problem of teaching music becomes that of directing musical activities in the classroom. The amount and the quality of learning are largely dependent on the personal interaction of the boys and the girls with the experiences provided by the teacher. Tastes differ, and, since the talents, aptitudes, and desires of the pupils vary in degree as well as in scope, the teacher is confronted with problems that are not always inherent in other subjects. The classroom teacher who is successful in teaching the other elementary-school subjects will find that music education may be juxtaposed with problems in other subjects provided that the teacher desires to study the subject deeply enough to enable him to see the significant relationships of each element of music: form and structure, rhythm, melody, harmony, timbre, etc. Always in music education, as in other subjects, the teacher begins with the learner's desire to learn more about the subject and then utilizes this desire as a stimulus to acquire control of the techniques of using the materials of music. If this desire does not exist, responsibility rests on the teacher to create it.

BAKER, EARL L. "The Inception and Development of a Course of Music for Parochial Schools," 1933, pp. 234–40.

BETZER, BERNICE. "How I Managed To Teach Music without the Ability To Sing," 1932, pp. 236–37.

BICKING, ADA. "Joyous Singing through Happy Approaches and Vitalized Study," 1931, pp. 358–62.

BOEPPLE, PAUL. "The Study of Rhythm," 1931, pp. 192–94.

BOUCHER, HELEN COY. "Beginning Music Reading in the Primary Grades," 1929, pp. 397–98.

BRYANT, LAURA. "The Function of Rote Singing and Music Reading in the Elementary Schools," 1936, pp. 137–39.

CARSON, CLEVA J. "Criteria for Selecting Songs for the Primary Grades," 1929, pp. 579–81.

CONKLIN, F. COLWELL (Chairman). "Song Material Recommended for Elementary School Choirs," 1936, pp. 231–34.

DRYSDALE, GRACE. "The Rhythm Orchestra in Instrumental Development," 1930, pp. 204–6.

EVANSON, JACOB A. "Classroom Choral Technique," 1932, pp. 140–49.

GARTLAN, GEORGE H. "The Piano in the Classroom," 1929, pp. 486–87.

GEHRKENS, KARL W. "Rhythm Training and Dalcroze Eurythmics," 1932, pp. 306–10.

GLENN, MABELLE. "Singing in the Elementary Schools and Junior High Schools," 1933, pp. 100–103.

GRAHAM, PERCY. "The Function of Rote Singing and Music Reading in the Elementary Grades," 1936, 141–46.

HALL, LUCY DUNCAN. "The Value of Eurythmics in Education," 1936, pp. 150–53.

HESSER, ERNEST G. "The Value of Choirs or Special Vocal Groups in the Elementary School," 1932, pp. 136–37.

HESSER, ERNEST G. "Ability Grouping through the Elementary School Choir," 1934, pp. 168–69.

HESSER, ERNEST G. "The Value of the Elementary School Choir," 1935, pp. 304–6.

HINGA, HOWARD N. "The Elementary Choir—Its Organization and Administration," 1934, pp. 162–67.

HOPKINS, L. THOMAS. "The Place of Creative Music in the Curriculum of the Elementary School," 1936, pp. 155–57.

JONES, ESTHER. "Three Part Sight Singing," 1929, pp. 398–99.

KELLEY, INA. "Music in Relation to Education in Michigan," 1933, pp. 126–27.

KWALWASSER, JACOB. "Voice Problems in Public School Music," 1933, pp. 104–10.

MILLER, C. H. "Sight Reading without Syllables," 1931, pp. 80–86.

MONTANI, NICOLA A. "Music in the Parochial School," 1933, pp. 224–33.

MORGAN, RUSSELL V. "New Phases of Music Education in the Elementary School," 1930, pp. 127–30.

MORRIS, MRS. PENDLETON S. "Music in the Emotional Life of the Child," 1933, pp. 62–64.

MURSELL, JAMES L. "Some Basic Principles in the Teaching of Rhythm," 1929, pp. 529–36.

MUSIC EDUCATION RESEARCH COUNCIL. "Course of Study in Music for Grades 1, 2, and 3," 1936, pp. 164–70.

NEWENHAM, FRANCES DICKEY. "Introducing Music to Upper Grade Pupils," 1929, pp. 399–400.

SCHREMBS, REV. JOSEPH. "Music in Catholic Schools," 1932, pp. 240–44.

SHERLOCK, ETHEL. "Present Day Trends in Music Education in the Elementary Schools," 1936, pp. 134–36.

SINGENBERGER, OTTO A. "The Elementary Grade Teacher and Music in the Catholic Schools," 1932, pp. 253–54.

STARR, MINNIE E. "Music Materials That Assist in Realizing the Objectives of Music Study," 1929, pp. 577–79.
THOMAS, CLARA L. "Music Material for Intermediate Grades," 1929, pp. 581–84.
THORN, ALICE G. "Music in the Kindergarten," 1936, pp. 148–49.
VANDEVERE, J. LILIAN. "The Rhythm Orchestra's Place," 1933, pp. 150–52.

UTILITY OF MUSIC PERFORMANCE

While it is easy to permit performances and public appearances to become the end, rather than an outgrowth, of music education, the classroom teacher will find that his programs can be greatly enriched by the use of music. As far as possible, the programs should be produced by the pupils.

BEALE, F. F. "Operettas for Their Music Content Value," 1935, pp. 228–29.
HARMAN, EFFIE E. "The Operetta—Pro and Con," 1932, pp. 292–94.
HARMAN, EFFIE E. "Operetta and Festivals in Intermediate Grades," 1935, pp. 225–27.
MURRAY, JOSEPHINE. "Program Activities in Rural Schools," 1935, pp. 328–34.
O'HARA, GEOFFREY. "Operetta in Schools," 1933, pp. 111–13.

Festivals and contests have been used for centuries to promote friendly rivalry, and they deserve to be included in the elementary-school program. Their utility depends largely on the conditions in the system in which the teacher is employed. The music should always be something selected from the everyday lessons rather than a difficult selection which requires a whole year for mastery.

BEACH, FRANK A. "The Evaluation of Musical Performances," 1931, pp. 338–43.
BEATTIE, JOHN W. "The School Music Festival," 1929, pp. 352–59.
CONKLIN, F. COLWELL. "The Elementary Grades in the Music Festival," 1932, pp. 286–90.
"Contests or Festivals?" A Symposium, 1936, pp. 340–50.
MAASKE, ROBEN. "The Organization of Rural School Music Festivals," 1937, pp. 244–45.

PROBLEMS OF TEACHING MUSIC IN RURAL SCHOOLS

The same musical activities that are desirable for boys and girls in town and city schools are highly desirable and practicable for pupils in the rural schools. Because teaching methods need to be adjusted to meet the peculiar needs of rural localities and because many rural-school teachers are certified to teach without having sufficient contact with music, the instruction is often limited to rote

singing, which is better than no music at all but not so desirable as a logical, sequential plan. If the rural-school teacher will find ten minutes each day, it is possible for him to accomplish much. The boys and girls in the rural schools who go to consolidated or nearby city high schools will find themselves greatly handicapped in their participation in the secondary-school music activities if they have had no music at all in the elementary grades.

BEHRENS, F. W. R. "Advantages for Rural School Music of a County-wide Organization," 1936, pp. 177–80.

BICKING, ADA. "Music—An Integral Part of the Rural School, Home, and Community," 1932, pp. 228–30.

BICKING, ADA. "Music in One- and Two-Room Schools," 1933, pp. 188–93.

BICKING, ADA. "High and Low Spots in Rural School Music," 1934, pp. 206–7.

"Course of Study in Music for Rural Schools," Music Education Research Council Report No. 19, 1936, pp. 183–98.

DRIVER, LEE H. "Music and Education in Rural Communities," 1932, pp. 231–33.

FULLERTON, C. A. "Music in One Room Rural Schools," 1929, pp. 332–35.

FULLERTON, C. A. "Vitalizing and Standardizing Music in the Rural Schools," 1931, pp. 299–301.

HALE, RICHARD B. "Procedures in Music in Rural Schools," 1937, pp. 242–43.

HESTER, HARRIET H. "Whither and How?" 1937, pp. 236–37.

HEYL, HELEN HAY. "Music as an Integrating Center for the Rural School Home," 1930, pp. 150–60.

HOOD, MARGUERITE V. "Rural School Music—Its Problems and Its Possibilities," 1931, pp. 271–74.

KELLER, EDITH M. "Music Theory in Rural Schools," 1934, pp. 213–14.

PARKER, JESSIE. "A Music Program for Rural Schools," 1931, pp. 206–8.

RICHMAN, LUTHER A. "Approaches to Rural School Music Education," 1937, pp. 230–32.

STARR, MINNIE E. "The Choir: A Method and a Motivation for Music Study in Rural Schools," 1931, pp. 211–12.

STOCKBERGER, LUCILE. "Music Teaching in the Rural Schools," 1929, pp. 148–50.

WOFFORD, KATE V. "Modern Education in the Small Rural School," 1937, pp. 232–36.

USE OF RADIO

With the widespread use and popularity of the radio, the elementary-school teacher is able to broaden and to enrich the work in music education by bringing many programs into the classroom which otherwise could not be heard. Broadcasting systems offer a

number of educational programs in music appreciation, that of the National Broadcasting Company presented by Walter Damrosch being especially noteworthy. The radio is an excellent means for motivating serious music study, and it provides much that is worthy of emulation.

DAMROSCH, WALTER. "Stimulating Music Appreciation through Radio," 1930, pp. 94–96.

GARBETT, ARTHUR S. "Development of Creative Music by Means of Radio," 1936, pp. 330–32.

HEAD, MYRTLE. "Three Years of Elementary School Radio Music Instruction," 1934, pp. 292–94.

LAPRADE, ERNEST. "Widening the Scope of Music Education by Radio," 1935, pp. 212–16.

MATTHEWS, ARTHUR P. "Radio in Music Education," 1929, pp. 424–26.

PERRY, ARMSTRONG. "Radio in Music Education," 1932, pp. 263–68.

PROUTY, PALOMA PATRICIA. "How Riverside County Schools Use the Radio," 1931, pp. 45–48.

WILLIAMS, SUDIE L. "Supplementing Music Study with Radio," 1935, pp. 210–11.

APPRECIATION LESSONS

Much can be learned from listening to music that has been recorded. Listening lessons should be a part of every program of music education because in this way boys and girls can come into contact with fine music that they otherwise would be unable to hear. The problems in teaching "appreciation" are many, but they are not so complicated or so difficult that a classroom teacher cannot undertake to have listening lessons a part of the program of music education.

BALDWIN, LILLIAN L. "The Present Trend in Music Appreciation in the Lower Grades," 1934, pp. 55–59.

BRITTON, LEOTI C. "Preparation for Music Appreciation Teaching," 1937, pp. 226–28.

CLARK, FRANCES E. "Music Appreciation in the Intermediate Grades," 1935, pp. 194–97.

COFFIN, LENORA. "Report of the Sub-committee on Music Appreciation for the First Six Grades," 1930, pp. 229–45.

COLSON, HERMINE WIECKING. "Musical Experiences for Children," 1937, pp. 220–21.

DUNHAM, FRANKLIN. "Can Music Appreciation Be Taught?" 1929, pp. 83–85.

EARHART, WILL. "Factors of Musical Appeal and Responses of Pupils to Them," 1930, pp. 139–49.

KEITH, ALICE. "Music Appreciation Materials," 1929, pp. 141–44.
KINSCELLA, HAZEL GERTRUDE. "The World through Music," 1936, pp. 303–8.
LOWRY, MARGARET. "Pupil Activity in the Listening Lesson," 1929, pp. 302–6.
MCGEHEE, THOMASINE. "Directed Experience," 1931, pp. 212–14.
RHETTS, EDITH. "The Phonograph as a Preparation for Symphonic Appreciation," 1930, pp. 195–97.
STREETER, MARGARET M. "Methods of Teaching Music Appreciation in the Elementary Grades," 1929, pp. 445–49.
THOMAS, CLOEA. "Modern Music for the Elementary Grades Children," 1936, pp. 315–20.
TOWLE, ELIZABETH N. "Development of Music Appreciation," 1937, pp. 221–24.
VAN DE BOGART, DORIS. "Brass Tacks in Music Appreciation," 1931, pp. 122–24.
WOLVERTON, JOSEPHINE. "Developing Appreciation through Vocal Music Lessons," 1935, pp. 205–7.

INTEGRATION

The integrated program is perhaps the classroom teacher's best opportunity to make a vital program of music education.

EARHART, WILL. "The Integrated Educational Program," 1934, pp. 46–50.
FINNEY, MARIE. "Basic Principles of All Forms of Art, Shown through Music Materials," 1929, pp. 586–89.
FLANAGAN, FLORENCE A. "Use of Music Materials in the Study of Literature, History, Geography, and Nature Study," 1929, pp. 584–85.
LOSSING, LAVERNA L. "Music in the Activity Curriculum," 1931, pp. 37–44.
MACKENZIE, MARTHA ALICE. "Fusion of Music with Academic Subjects," 1935, pp. 182–83.
MACLEAN, IDA. "Experiments with Music in the Integrated Program," 1935, pp. 184–91.
WATSON, DUDLEY CRAFTS. "Recognition of Beauty through Art, Literature, and Music," 1929, pp. 630–35.

PSYCHOLOGY, TESTS AND MEASUREMENTS, AND RESEARCH

Much research is being done in the field of music education[1] that may be of value to the classroom teacher.

BIENSTOCK, SYLVIA F. "Report of National Survey of Experimental Projects in Music Education," 1936, pp. 277–83.
BIENSTOCK, SYLVIA, and MCDAVID, NINA (Compilers). "Bibliography of Studies in the Field of Music Education," 1936, pp. 284–88.

[1] Earle Connette, with the co-operation of James L. Mursell, "Special Methods and Psychology of the Elementary-School Subjects: Music," *Review of Educational Research*, VII (December, 1937), 491–92, 561–62.

CANFIELD, SUSAN T. "Research Applied to Creative Music, and to Power with Rhythm and Rhythm Notation," 1934, pp. 238–42.

GERRISH, OLIVE M. "Measuring the Musical Accomplishment of Young Children," 1933, pp. 297–305.

HOPKINS, L. THOMAS. "Classroom Experimentation in Functional Music," 1936, pp. 298–301.

LARSON, WILLIAM S. "The Value of Tests and Measurements in Music Education," 1932, pp. 318–24.

LARSON, WILLIAM S. "The Influence of the Study of Musical Talent on Trends in Music Education," 1934, pp. 227–33.

MURSELL, JAMES L. "Some Fundamental Principles of Musical Instruction," 1930, pp. 99–105.

ORTMANN, OTTO. "Span of Vision in Note Reading," 1937, pp. 88–93.

SCHULTZ, E. J. "Testing Listening Power in Music," 1933, pp. 306–12.

TEACHER PREPARATION

What is expected of the classroom teacher who teaches music? What preparation and educational training should he have? Do specialists think classroom teachers can teach music successfully?

BEATTIE, JOHN W. "The Musical Education of the Grade School Teacher, in Training and in Service," 1929, pp. 549–51.

CORNER, MRS. WATSON. "What Music Training Does the Supervisor Consider Absolutely Essential for the Normal School To Give the Grade Teacher?" 1931, pp. 255–57.

FISHER, C. H. "Musical Training Essential for the Modern Teacher in the Elementary School," 1933, pp. 170–75.

HOOD, MARGUERITE V. "Training Teachers To Organize Music Classes in Rural and Small Towns," 1933, pp. 211–15.

HOOD, MARGUERITE V. "The Normal School's Responsibility in Rural School Music," 1934, pp. 208–10.

KELLER, EDITH M. "Extent and Content of Music Courses Required of Grade Teachers Preparing To Teach in Rural and Village Schools," 1929, pp. 555–62.

SCHWIN, HELEN L. "Directed First Experience in Teaching Music," 1935, pp. 367–70.

SMITH, VIRGINIA. "State Certification Requirements in Music for the Grade Teacher," 1937, pp. 195–99.

WILSON, M. EMETT. "The Teacher's Use of Research," 1935, pp. 163–66.

WINKLER, THEODORE. "The Music Education of the Grade School Teacher, in Training and in Service, from the Standpoint of the School System," 1929, pp. 552–55.

ADMINISTRATION AND SUPERVISION

The teacher plays such an important role in the administration and the supervision of music that no complete consideration of music education could omit some references to the aim, the definition, and the function of music supervision. The purpose of supervision is to improve the teacher and the teaching act and thereby enhance the usefulness of the school to the child.

BEATTIE, JOHN W. "A Need for Re-evaluation of Elementary School Music," 1931, pp. 349–55.

BUSCH, GERALD F. "Equalization of Opportunity for the American Child," 1929, pp. 515–21.

CARSON, CLEVA J. "The In-Service Training in Music of the Grade Teacher," 1937, pp. 190–95.

CONNETTE, EARLE. "Music Supervision: What It Is and Some Policies Requisite for Effectiveness," 1937, pp. 164–73.

CUTRIGHT, PRUDENCE. "Principles and Methods of Supervision," 1937, pp. 176–77.

CUTTS, CHARLES R. "Gaining Community Support for School Music Activities," 1931, pp. 280–84.

DENNIS, CHARLES M. "The Training of Teachers in Service," 1936, pp. 68–69.

GORANSON, R. F. "The In-and-about Club Movement," 1935, pp. 136–40.

LINDSAY, GEORGE L. "The Supervision of Music in the Elementary Grades," 1933, pp. 76–79.

MORGAN, RUSSELL V. "The Creative Attitude in Music Education," 1931, pp. 290–91.

MORGAN, RUSSELL V. "The Function of Supervision in Music Education," 1937, pp. 162–64.

MUSIC EDUCATION RESEARCH COUNCIL. "Music Supervision in the Public Schools," 1936, pp. 93–100.

"Music Supervision [panel discussion]," 1936, pp. 72–92.

O'REILLY, JOSEPHINE. "Some Suggestions from a Grade Teacher to the Music Supervisor," 1929, pp. 562–64.

SHUTT, FLORA. "The Value of Supervision to the Classroom Teacher," 1937, pp. 173–75.

SOMMERS, HOBART. "The Principal in Music," 1930, pp. 122–27.

WHAT CHILDREN SEE IN PICTURES

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INTRODUCTION

RECENT years have witnessed marked changes in primary readers. One of the most striking developments has been the increased use of illustrations. In some of the more recent books the pictures comprise one of the chief features.

Some research has been directed toward the problems connected with illustrations in primary readers. Several studies[1] have shown the types of illustrative techniques which children prefer. Another study,[2] made to determine how much the pictures in a given basal reader aided the child in his comprehension of the reading matter, indicated that the pictures did not increase the child's comprehension to any appreciable degree.

Many reasons may be advanced for the failure of these pictures to help the children understand the material which they read in the books.[3] It is possible that the reading matter was so simple that the pictures were not needed to assist in interpreting the content and therefore added nothing to the comprehension achieved merely by

[1] *a*) G. LaVerne Freeman and Ruth Sunderlin Freeman, *The Child and His Picture Book*. Chicago: Northwestern University Press, 1933.

b) Bonnie E. Mellinger, *Children's Interests in Pictures*. Teachers College Contributions to Education, No. 516. New York: Teachers College, Columbia University, 1932.

c) William A. Miller, "The Picture Choices of Primary-Grade Children," *Elementary School Journal*, XXXVII (December, 1936), 273–82.

[2] William A. Miller, "Reading with and without Pictures," *Elementary School Journal*, XXXVIII (May, 1938), 676–82.

[3] *a*) William A. Miller, "The Picture Crutch in Reading," *Elementary English Review*, XIV (November, 1937), 263–64.

b) William A. Miller, "Why Illustrate the Textbook?" *Child Life* (Teachers' Edition), XIX (April, 1938), 3–4.

reading the printed matter. It is also possible that the pictures were merely illustrative and presented no ideas in addition to those presented adequately in the reading matter. At the same time, the pictures may have presented content so unfamiliar to the pupil that he was unable to use it in interpreting the reading matter.

On the other hand, the failure of the pictures to increase the children's comprehension of the accompanying reading matter may have been due to the children's inability to utilize the pictures as they could have been used. There may have been absolute misinterpretation on their part; they may have failed to note the constituent parts of a given picture; or they may have failed to see relationships existing between the several parts of a picture. It is possible, too, that the teachers failed to direct the children's attention to the adequate use of the pictures or to those parts of a given picture which might have aided them in securing greater comprehension of the accompanying matter. All these possibilities suggest problems for investigation. Probably one of the most fundamental of these problems is concerned with what children see in pictures without any sort of guidance.

PURPOSE AND METHODS OF THIS INVESTIGATION

The purpose of this study was to determine what one hundred children in Grade III saw in six pictures without the suggestion or the stimulation provided by any definite direction or guidance. More specifically, information was sought to determine how many items which together make up a picture were seen by these hundred children when they were placed on their own responsibility. Differentiation was made between minor items and those of a generalized nature which, when taken together, carry the burden of telling the story of the picture.

One hundred third-grade children in two schools in Springfield, Illinois, furnished the data for this study. The chronological ages of the children ranged from eight years and one month to nine years and two months. The intelligence-quotient range, determined by the Kuhlmann-Anderson Intelligence Tests, was from 82 to 131, with more than a third of the children having intelligence quotients

of 110 or more. For the most part, the families from which these children came were in the favored economic class.

Six pictures were selected from books used by third-grade children. These pictures were numbered and mounted on sheets of paper nine by twelve inches in size. Each picture was analyzed by the investigator for its constituent items. One of the pictures contained twenty items, three contained twenty-two items, one contained twenty-four items, and one contained twenty-six items.

A check sheet was prepared for each picture, on which appeared a list of the items presented in the picture and, in addition, a number of spaces for entry of the child's name, sex, age, and intelligence quotient. Enough copies of these check lists were prepared to provide one for each child.

Each child was tested individually. The pictures were shown to him one at a time. The examiner said to the child, "I am going to show you several pictures. As I show you each picture, tell me all the things you see in it, what you think when you are looking at it, and what you think is happening in the picture." These directions were repeated to a child whenever repetition seemed necessary.

The check list was in the possession of the examiner so that the child would have no clues on what he was expected to see in the pictures. As a child mentioned that he saw an item in a picture, the examiner checked that item on the list. Some children made remarks about the pictures, and these comments were written on the lists. No child mentioned any item not appearing on the list. Each child was given as much time as he wished for examining the pictures.

When the testing was completed, the number of items mentioned by each child for each picture was secured. Comparisons were made on the basis of the total number of items identified, as well as the number of generalized items identified. The identifications were classified according to sex, chronological age, and intelligence quotient.

RESULTS OF THE INVESTIGATION

Total number of identifications.—The number of items identified by the one hundred children are shown in Table 1. This table should be read as follows: In Picture 1, one child identified sixteen items,

one child identified fifteen items, two children identified fourteen items, and so on. There were twenty-two items in the picture. For Picture 1 the number of possible identifications for these children

TABLE 1

NUMBER OF ITEMS IN EACH OF SIX PICTURES IDENTIFIED BY ONE HUNDRED THIRD-GRADE CHILDREN

Number of Items Identified	Number of Pupils Identifying Items					
	Picture 1	Picture 2	Picture 3	Picture 4	Picture 5	Picture 6
26	.....	.....	.....	.....	0	.....
25	.....	.....	.....	.....	0	.....
24	.....	.....	.....	0	0	.....
23	.....	.....	.....	0	0	.....
22	0	0	0	0	0	.....
21	0	0	0	0	0	.....
20	0	0	0	0	0	0
19	0	0	0	0	0	0
18	0	0	0	1	0	0
17	0	1	0	1	2	1
16	1	0	0	1	1	0
15	1	1	1	2	2	0
14	2	1	1	2	6	0
13	2	3	3	6	4	3
12	3	1	1	7	5	5
11	7	7	5	6	1	5
10	9	11	10	5	6	10
9	9	13	9	6	18	14
8	10	14	12	11	17	11
7	18	12	19	15	7	12
6	10	8	12	12	14	7
5	14	11	14	12	10	17
4	12	9	8	9	5	9
3	2	5	3	2	0	1
2	0	3	2	2	1	4
1	0	0	0	0	1	0
0	0	0	0	0	0	1
Total	759	757	732	812	851	743
Percentage of possible identifications	34.5	34.4	33.3	33.8	32.7	37.2
Mean per child	7.59	7.57	7.32	8.12	8.51	7.43
Standard deviation	2.84	2.96	2.63	3.33	3.20	2.96

was 2,200; and they identified 34.5 per cent of this number. The results for Pictures 2, 3, 4, 5, and 6 are to be read from the table in the same manner.

Table 1 indicates that relatively few items in a picture impressed children sufficiently to cause them to mention the fact. No child

identified all the items in any picture. The best record was made by the pupil who reported seeing seventeen of a possible twenty items in Picture 6. Most children identified from five to eight items in each picture.

The percentages of identification show that the children did not identify most of the details in the pictures. The best record was made on Picture 6; the children mentioned 37 per cent of the details in this picture. The percentages of possible identifications ranged from 33 to 37. It may be that the children noticed more than they reported. Many of the items were commonplace and may have escaped detailed mention because of their naturalness.

The difference in the mean number of items identified in any two pictures was statistically insignificant with the exception of one case. Picture 5 was significantly more difficult than Picture 3.

Data not given here indicate that the girls identified a larger percentage of items in five of the six pictures than did the boys. In the other picture the percentages were the same for both sexes. The differences were small, however, and none was statistically significant.

Data not given here also indicate that in Grade III chronological age is not a factor influencing the number of identifications made.

Eighteen comparisons were made between groups at different intelligence-quotient levels. Only three of these differences were statistically significant. On Picture 1 the highest intelligence-quotient group was statistically superior to the lowest group. On Picture 2 both the middle and the highest groups were statistically superior to the lowest group. It is possible that the absence of other significant differences was due to the extremely limited sampling, although the trend of the differences was in favor of the high intelligence-quotient groups. Apparently, children with above-average intelligence may be expected to identify more items in a picture than do children with below-average intelligence.

Comparison of generalized items.—While an arithmetical number is equal to the sum of its parts, a picture is more than the sum of its parts because the relations of the parts tell a story. The check lists used in this study contained some items which were generalized in nature and required some interpretation on the part of the pupil.

For the most part, these generalized items carried the theme of the story. Failure to recognize and to interpret these items meant that the story told by the picture was not grasped. It is important, therefore, to study the children's identification of these generalized items.

In Table 2 are given the generalized items in each picture and the number of children who reported recognizing these items. In the case of Picture 1, a fourth of the children indicated that they were looking at a park or a playground. Only one child generalized that it was summer. Yet practically all the children were familiar with parks and playgrounds. Their attention apparently was given to the slide, to the sandbox, and to the other details which make up the total picture. The most evident general idea in Picture 2 was that the boys were marching or playing soldier and that a bear had joined them. Fewer than half the children mentioned that the boys were playing soldier, and only six realized that, since the bear had a collar and a chain around his neck, he had broken away from captivity. In Picture 3 a pony had balked, and some children were trying to get him off a bridge so that a car could cross. Fewer than a third of the pupils mentioned that traffic was blocked, and fewer than half seemed to realize that the pony would not go. The idea of a balky pony may not be familiar to many city children, and this possibility may account for their not realizing what was happening. In the case of Picture 4, more than half the children mentioned the firetruck going to a fire. Inasmuch as practically all city children have seen this event, it is surprising that more of them did not speak of it. The other two generalized items in this picture were scarcely noticed. A Halloween party was the central theme of Picture 5. Fewer than half the children reported that a Halloween party was in progress. Although the children in the picture were grouped around a table which was set with dishes and food, only 10 per cent of the pupils indicated that they thought the children at the party were going to eat. The picture illustrated a part of a story in which a black cat jumps on the table and causes much excitement. Only six children mentioned this phase of the story. Picture 6 presented a rural scene. Three children were walking along a road, carrying baskets on their arms. Sixteen pupils mentioned that the children

in the picture were probably going to gather something and seven that they lived on a farm.

TABLE 2

NUMBER OF CHILDREN IDENTIFYING GENERALIZED ITEMS IN SIX PICTURES

Item	Number of Boys	Number of Girls	Total
Picture 1:			
At the park	7	4	11
Playground	6	8	14
Time of year	1	.....	1
Total	14	12	26
Picture 2:			
Boys playing soldier	28	21	49
Wind blowing	15	9	24
Bear broke loose	5	1	6
Total	48	31	79
Picture 3:			
Traffic blocked	18	14	32
Pony will not go	24	18	42
Time of year	3	2	5
Total	45	34	79
Picture 4:			
There is a fire	34	25	59
Time of year	1	2	3
Two boys are calling	1	2	3
Total	36	29	65
Picture 5:			
Halloween party	27	17	44
Children in costume	16	21	37
Children going to eat	4	6	10
Children excited	3	3	6
Total	50	47	97
Picture 6:			
Children going to gather something	7	9	16
Children live on a farm	4	3	7
Time of year	1	.....	1
Total	12	12	24

Only in the case of Picture 4 did more than half the children report that they grasped the central idea of the story of the picture. In

two other pictures nearly half the children identified one of the three generalized items. In the three remaining pictures the number of children who reported that they saw the central idea of the picture ranged from a tenth to a third of the group. Even in cases where the children were given credit for recognizing the central theme of the picture, it is practically certain that few saw the relations between the three or four generalized items which unite to make the meaning of the picture clear.

TABLE 3

PERCENTAGE OF GENERALIZED ITEMS IDENTIFIED IN EACH OF SIX PICTURES BY ONE HUNDRED THIRD-GRADE CHILDREN

Picture	Number of Identifications Possible	Identifications Made	
		Number	Per Cent
1	300	26	8.7
2	300	79	26.3
3	300	79	26.3
4	300	65	21.7
5	400	97	24.3
6	300	24	8.0
Total	1,900	370	19.5

In Table 3 are given the total possible number of generalized identifications in each picture, the number of identifications made by the children, and the percentage that the number of identifications is of the total possible number. This table shows that the number of identifications ranged from 8.0 per cent to 26.3 per cent of the possible number.

In many cases, when the child was through looking at a picture, the examiner asked him about the generalized items. Most of the children saw the idea when it was brought to their attention but admitted that they had not thought about it until it had been pointed out to them.

Data not given here show that there was no statistically significant difference between the sexes in ability to identify generalized items in the pictures. Comparisons were also made of the ability to identify generalized items at different intelligence-quotient levels. None of these differences was statistically significant.

SUMMARY

The results of this investigation may be summarized as follows: (1) Children reported seeing relatively few of the items which make up a picture. (2) The items of a picture are seen in isolation rather than as parts of a unified whole. (3) The most important items in a picture often escape the notice of the children. (4) Children with higher intelligence quotients tend to identify more items in pictures than do children with lower intelligence quotients. (5) In Grade III chronological age is not an important factor in the identification of items in pictures. (6) There are no significant sex differences in the ability to identify items in pictures. (7) If pictures are to be an aid to the understanding of the printed material which they accompany, teachers will need to direct the attention of children to important items in pictures and to develop the interpretation of these items.

Further research might well be directed toward the problem of determining what types of items in pictures children identify most readily.

MENTAL TESTS IN THE FIRST GRADE

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*

It is a widespread practice among schools using group intelligence tests in the primary grades to use two tests to increase the reliability of the measurement. These are frequently alternate forms of the same test. The results of testing with two forms, namely, the mental ages and the intelligence quotients, may conceivably be averaged if no consideration is given to the gain on the second form as a result of the practice on two similar tests.

If different tests, such as the Pintner-Cunningham Primary Mental Test, Form A, and the Kuhlmann-Anderson Intelligence Tests, Grade I, are used, a number of difficulties are introduced. There is always the problem of equating mental ages and intelligence quotients. Administrators and teachers are inclined to accept the intelligence quotient at face value and to disregard the test from which it was obtained. An intelligence quotient of 95, for example, secured from the Pintner-Cunningham test, from the Kuhlmann-Anderson test, or from any other primary test is often interpreted as indicating the same level of learning ability regardless of the fact that each of these tests has a highly individualized body of subject matter. Some tests are largely dependent on the ability to follow directions or to attend to details, others on language comprehension, and still others on the recognition of pictorial likenesses and differences.

A similar problem is that of comparing new entrants with the groups already enrolled. The intelligence quotients of new pupils may have been derived from any of a dozen tests other than that used in the school. It is to aid in the solution of these and similar problems that the following data are offered. The Kuhlmann-Anderson Intelligence Tests, Grade I, Second Semester, and the Pintner-Cunningham Primary Mental Test, Form A, are first equated. Later the Pintner-Cunningham and the Detroit First-Grade Intelligence

Test are similarly equated, and the Kuhlmann-Anderson and the Detroit tests are contrasted. Statistical data on the comparisons are given in Table 1.

The Kuhlmann-Anderson and the Pintner-Cunningham tests were

TABLE 1

INTELLIGENCE QUOTIENTS SECURED FROM KUHLMANN-ANDERSON INTELLIGENCE TESTS, GRADE I, SECOND SEMESTER (REGULAR AND ENLARGED), PINTNER-CUNNINGHAM PRIMARY MENTAL TEST, FORM A, AND DETROIT FIRST-GRADE INTELLIGENCE TEST, FORM A

Tests Compared	Number of Cases	Intelligence Quotient Secured				Difference between Means	Standard Error of Difference*	Critical Ratio
		Range	Median	Mean	Standard Deviation			
Kuhlmann-Anderson, regular	54	88–124	106.1	106.0	8.7	0.2	0.42	0.48
Kuhlmann-Anderson, enlarged	54	88–124	105.8	106.2	8.8			
Kuhlmann-Anderson	95	87–143	112.0	112.3	13.2	5.4	1.26	4.29
Pintner-Cunningham	95	80–148	117.6	117.7	12.7			
Kuhlmann-Anderson (administered 2–7 days before Pintner-Cunningham)	50	88–122	105.2	105.2	9.2	11.0	1.51	7.28
Pintner-Cunningham	50	80–142	116.2	116.2	12.5			
Kuhlmann-Anderson	45	87–143	118.8	119.0	10.3	0.6	1.60	0.38
Pintner-Cunningham (administered 6-7 months before Kuhlmann-Anderson)	45	100–144	123.3	119.6	12.0			
Detroit	102	94–147	114.7	116.3	13.5	3.7	1.50	2.47
Pintner-Cunningham	102	86–159	120.3	120.0	15.0			
Kuhlmann-Anderson	73	90–143	120.6	120.6	10.4	3.2	1.50	2.13
Detroit	73	87–147	116.9	117.4	21.0			

* The long formula was used for finding the standard error of the difference since the variables are correlated. See Helen M. Walker, "Concerning the Standard Error of a Difference," *Journal of Educational Psychology*, XX (January, 1929), 53–60.

given to the pupils of the kindergarten and Grade I in the Friends Seminary and the Brooklyn Friends School during the years 1933–37, inclusive. The same testing program, dates, and procedures were employed in these years. The Kuhlmann-Anderson battery was composed of Tests 4–13, Grade I, Second Semester, as arranged by

the authors, or of Tests 3–16. The latter, enlarged battery was used in 1937 because, in the opinion of some educators, the regular battery did not yield median intelligence quotients comparable with those from other testings of private-school pupils (5:34). However, the data in the first comparison in Table 1 show that the difference between the mean intelligence quotients on the regular and the enlarged batteries is statistically insignificant. The correlation between the intelligence quotients for these fifty-four cases was $+.938 \pm .011$. Therefore the writer believes that, for the purposes of the research described herein, the same Kuhlmann-Anderson battery was used throughout the period of testing; in other words, that, although the number of tests of the Kuhlmann-Anderson battery, Grade I, Second Semester, was not the same in all cases, the similarity between the regular and the enlarged batteries permits treatment of the results as though the same battery had been used.

It is desirable to note at this point that the discussion of the intelligence quotients derived from the Kuhlmann-Anderson test is confined to those derived from the battery for Grade I, Second Semester. The data offered are not applicable to any other Kuhlmann-Anderson battery for any other grade. A much larger number of cases could have been used if pupils who had taken any of the Kuhlmann-Anderson batteries had been included. There is a tendency to speak of this series as though it were one test (instead of nine different tests, as it really is) and to consider the intelligence quotients from the various batteries as directly comparable. Nemzek (4) has already pointed out this, as yet, unwarranted assumption.

The comparison given in Table 1 of the intelligence quotients on the Kuhlmann-Anderson and the Pintner-Cunningham tests shows that there is a distinct tendency for the intelligence quotients on the Pintner-Cunningham test to be higher than those on the Kuhlmann-Anderson battery. The median of the differences in the intelligence quotients of the two is 9.5, with a range of 0–31. Moreover, the difference between the tests is more than a chance difference, for there are 100 chances in 100 that there is a real difference between the means.

When comparison of the intelligence quotients is made according to the order in which the tests were given, the tendency is again

present when the Kuhlmann-Anderson test was given within two days to a week before the Pintner-Cunningham test. The median of the differences in the intelligence quotients is 9.6, with a range of 0–29. The chances are 100 in 100 that there is a real difference between the means. This difference is wholly reliable.

Table 1 gives data on the results when the Pintner-Cunningham test was given first, in March or April, and the Kuhlmann-Anderson battery was given in the following October. The median of the differences in the intelligence quotients is 9.4, with a range of 0–31 points. The chances are 65 in 100 that there is a real difference between the means.

Unfortunately the same interval did not elapse between the intelligence tests in both instances, from two to seven days separating the testing when the Kuhlmann-Anderson test was given first and from six to seven months when the Pintner-Cunningham test was given first. To some extent this difference renders the comparison between the results tentative. Since the greater difference between the means occurred when the tests were given within a relatively short span of time, the difference might be attributed to a practice effect. However, the tendency for the Pintner-Cunningham intelligence quotients to be higher is present in all three comparisons described thus far. In the three instances the Pintner-Cunningham median is distinctly higher, since it is not disturbed, as is the mean, by the tendency of this test to greater variability.

For this reason the writer feels that the need for equating the intelligence quotients of the two tests, if only tentatively and grossly, is a real need. This equating has been done on the basis of the standard deviations of the largest distribution, that of ninety-five cases. Briefly, the method consists in matching points measured from the mean in standard deviations or fractional parts thereof, that is, the intelligence quotient at plus one standard deviation in the Pintner-Cunningham distribution is matched with the intelligence quotient at the same point in the Kuhlmann-Anderson distribution. This method of equating is not influenced by the fact that the means are higher than those which might be found in a larger, more normal distribution (2).

The results of this equating are given in Table 2. This table is not

suitable for comparing Pintner-Cunningham intelligence quotients with intelligence quotients derived from any other Kuhlmann-Anderson battery than that of Grade I, Second Semester, of the fourth edition of that series. The limitations of size of the sampling and methods of procedure render this table unsuitable for any such method as averaging the intelligence quotients from the two tests.

TABLE 2

EQUIVALENT INTELLIGENCE QUOTIENTS OF KUHLMANN-ANDERSON INTELLIGENCE TESTS, GRADE I, SECOND SEMESTER, AND OF PINTNER-CUNNINGHAM PRIMARY MENTAL TEST, FORM A

Kuhlmann-Anderson	Pintner-Cunningham	Kuhlmann-Anderson	Pintner-Cunningham	Kuhlmann-Anderson	Pintner-Cunningham	Kuhlmann-Anderson	Pintner-Cunningham
75	82	94	100	113	118	132	137
76	82	95	101	114	119	133	138
77	83	96	102	115	120	134	139
78	85	97	103	116	121	135	139
79	86	98	104	117	122	136	141
80	86	99	105	118	123	137	142
81	87	100	106	119	124	138	142
82	88	101	107	120	125	139	143
83	90	102	108	121	126	140	144
84	90	103	109	122	127	141	146
85	91	104	110	123	128	142	146
86	92	105	110	124	129	143	147
87	94	106	111	125	129	144	148
88	94	107	113	126	130	145	149
89	95	108	114	127	132	146	149
90	96	109	114	128	133	147	151
91	97	110	115	129	134	148	152
92	98	111	116	130	135	149	153
93	99	112	118	131	136	150	153

The table is given in its entirety only because the differences between the intelligence quotients of the two tests vary slightly at different levels. The difference becomes progressively less, from seven points at the lower level to three points at the upper. While the table is suitable for determining approximate equivalents, the user should be cognizant of the fact that differences may range from nothing to thirty-one points, with the central point of the differences at approximately nine points.

Although it does not affect the use of Table 2, the fact that it is misleading to use intelligence quotients from various batteries of the

Kuhlmann-Anderson tests as though they were directly comparable is supported by the correlations between these tests. The Pearson product-moment coefficient of correlation between the Kuhlmann-Anderson, Grade I, Second Semester, and the Pintner-Cunningham test was $+.546 \pm .048$. For 120 cases (including the present 95) to whom the Pintner-Cunningham test and one of the Kuhlmann-Anderson batteries were given, the correlation between intelligence quotients was $+.869 \pm .015$. This correlation is one between the Pintner-Cunningham test and seven unequated tests treated as one. In the writer's opinion, it has little or no significance.

The Pintner-Cunningham and the Detroit First-Grade Intelligence Test, Form A, may be similarly equated. Table 1 shows the results of administration of these tests to 102 pupils during the period 1929–36. Each year the Pintner-Cunningham test was given in the kindergarten in March or April and the Detroit test in Grade I in October. The chances are 99 in 100 that there is a real difference between the means. The median of the differences in the intelligence quotients is 9.9, with a range of 0–37. As in the contrast between the Pintner-Cunningham and the Kuhlmann-Anderson tests, there is a distinct, reliable tendency for the Pintner-Cunningham intelligence quotients to be significantly higher. The correlation between the intelligence quotients on the Detroit and the Pintner-Cunningham tests for these 102 cases was $+.43 \pm .056$. This correlation is distinctly lower than that of .698 found by Sisters McGraw and Mangold (3) or those of .752 and .627 of Viele (13) or the .732 of Sangren (9).

Table 3, derived from the standard deviations of the 102 cases, may be used to determine the approximate equivalents of the intelligence quotients of the Pintner-Cunningham and the Detroit tests.

Data for seventy-three cases tested on the Kuhlmann-Anderson and the Detroit First-Grade tests are also compared in Table 1. The chances are 98 in 100 that there is a real difference between the means. Because of the relatively small sample and the atypical nature of the distribution of the Detroit test, the writer does not feel justified in offering an equating of the intelligence quotients of these two tests. Such equating rests in part on the premise that the

standard deviations of the distributions on which the equating is based are similar to those obtained in different samples of the first-grade population. In Table 4 are given the standard deviations of a number of studies in which these three tests were used. The standard deviations of the distributions of the present study are repeated to permit comparison. It is apparent that the dis-

TABLE 3

EQUIVALENT INTELLIGENCE QUOTIENTS OF PINTNER-CUNNINGHAM PRIMARY MENTAL TEST, FORM A, AND DETROIT FIRST-GRADE INTELLIGENCE TEST, FORM A

Pintner-Cunningham	Detroit	Pintner-Cunningham	Detroit	Pintner-Cunningham	Detroit	Pintner-Cunningham	Detroit
75	67	95	89	115	111	135	133
76	67	96	90	116	112	136	134
77	68	97	91	117	113	137	135
78	70	98	92	118	114	138	136
79	71	99	93	119	115	139	137
80	73	100	94	120	116	140	138
81	74	101	95	121	117	141	139
82	75	102	96	122	118	142	140
83	76	103	97	123	119	143	142
84	77	104	98	124	121	144	143
85	78	105	99	125	122	145	144
86	79	106	100	126	123	146	145
87	80	107	101	127	124	147	146
88	82	108	103	128	125	148	147
89	83	109	104	129	126	149	148
90	84	110	105	130	127	150	149
91	85	111	106	131	128	151	151
92	86	112	107	132	129	152	152
93	87	113	109	133	130	153	153
94	88	114	110	134	131	154	154

tribution of the seventy-three cases in the present study to whom the Detroit test was given is quite different from other samples. This fact and the correlation of $+.878 \pm .018$ between the Detroit and the Kuhlmann-Anderson tests do not, for the present, warrant an equating table. A rough contrast may be made between the distributions used in the present study and those of other studies by comparing the mean standard deviation of the latter with the standard deviation used here as a basis for equating. The standard deviation of 13.2 used in equating the Kuhlmann-Anderson test with the

Pintner-Cunningham test compares favorably with the mean of 11.38 of other studies. The standard deviation of 12.7 for the Pintner-Cunningham test also compares favorably with the mean of

TABLE 4

STANDARD DEVIATION OF DISTRIBUTIONS OF INTELLIGENCE QUOTIENTS IN STUDIES EMPLOYING KUHLMANN-ANDERSON INTELLIGENCE TESTS, PINTNER-CUNNINGHAM PRIMARY MENTAL TEST, OR DETROIT FIRST-GRADE INTELLIGENCE TEST

Study	Kuhlmann-Anderson		Pintner-Cunningham		Detroit Test	
	Standard Deviation	Number of Cases	Standard Deviation	Number of Cases	Standard Deviation	Number of Cases
Present study	13.2	95	12.7	95	.....	.....
Present study	.....	.....	15.0	102	13.5	102
Present study	10.4	73	.....	.....	21.0	73
Grant (1)	.....	.....	16.2	3,561	.....	.....
Educational Records Bureau (6)	.....	.....	15.6*	268	.....	.....
Educational Records Bureau (5)	9.9*	193	.....	.....	.....	.....
Educational Records Bureau (7)	9.9*	205	.....	.....	.....	.....
Educational Records Bureau (8)	10.4*	225	.....	.....	.....	.....
Sawyer (11)	13.9	73	.....	.....	14.2	73
Seagoe (12)	.....	.....	12.6	186	13.3	120
Sangren (10)	.....	.....	14.0	100	13.3	100
Spache†	12.8	131	13.9	180	12.3	192
Mean (excluding present study)	11.38	.....	14.46	.....	13.28	.....

* Derived from author's data.

† Secured from all cases to whom tests were given in 1933–37.

other studies, 14.46. In the equating of the Pintner-Cunningham and the Detroit tests, the standard deviations used were 15.0 and 13.5, respectively. The mean standard deviations of other studies for these two tests are 14.46 and 13.28, respectively.

BIBLIOGRAPHY

1. GRANT, ALBERT. "A Comparison of the Metropolitan Readiness Tests and the Pintner-Cunningham Primary Mental Test," *Elementary School Journal*, XXXVIII (October, 1937), 118–26.

2. KEFAUVER, GRAYSON N. "Need of Equating Intelligence Quotients Obtained from Group Tests," *Journal of Educational Research*, XIX (February, 1929), 92–101.

3. MCGRAW, SISTER MARY LOUISE, and MANGOLD, SISTER MARIE CECILIA. *Group Intelligence Tests in the Primary Grades*, pp. 28–29. Educational Research Bulletin of the Catholic University of America, Vol. IV, No. 2. Washington: Catholic Education Press, 1929.

4. NEMZEK, CLAUDE L. "A Note concerning the Kuhlmann-Anderson Tests," *Peabody Journal of Education*, XII (March, 1935), 238–39.

5. *1933 Fall Testing Program in Independent Schools*. Educational Records Bulletin No. 12. New York: Educational Records Bureau.

6. *1935 Fall Testing Program in Independent Schools*, p. 21. Educational Records Bulletin No. 16. New York: Educational Records Bureau.

7. *1936 Fall Testing Program in Independent Schools and Supplementary Studies*, p. 25. Educational Records Bulletin No. 19. New York: Educational Records Bureau.

8. *1937 Fall Testing Program in Independent Schools*, p. 20. Educational Records Bulletin No. 22. New York: Educational Records Bureau.

9. SANGREN, PAUL V. "Comparative Validity of Primary Intelligence Tests," *Journal of Applied Psychology*, XIII (August, 1929), 400.

10. SANGREN, PAUL V. "Statistical Comparisons of Certain Intelligence Tests." Kalamazoo, Michigan: Bureau of Educational Measurement and Research, Western State Teachers College, 1928.

11. SAWYER, CLIFFORD R. "A Comparison of the Detroit and Kuhlmann-Anderson Intelligence Tests as Applied in the Grand Forks Public Schools." Unpublished Master's thesis, University of North Dakota, 1931.

12. SEAGOE, M. V. "An Evaluation of Certain Intelligence Tests," *Journal of Applied Psychology*, XVIII (June, 1934), 432–36.

13. VIELE, ADA B. "A Study of Four Primary Mental Tests," *Elementary School Journal*, XXV (May, 1925), 675–81.

SELECTED REFERENCES ON TEACHER EDUCATION[1]

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THE references included in this bibliography were published between July 1, 1937, and June 30, 1938. These publications discuss significant issues relating to the education of teachers in elementary and secondary schools and in higher institutions. Three criteria were used in selecting from the much larger number of references published those included in this list: (1) objective analyses and statistical accounts of important aspects of teacher education; (2) comprehensive reports in the form of bulletins, yearbooks, and reports of proceedings; (3) materials which are reasonably accessible.

676. ADAMS, FRANK. "Educational Principles in Practice-teaching," *Educational Administration and Supervision*, XXIV (January, 1938), 61–68.

Lists the principles exemplified in student teaching, as observed by supervising teachers, and the types of activities in which the principles were applied.

677. ALLEN, CECIL H. *Legal Principles Governing Practice Teaching in State Teachers Colleges, Normal Schools, and Public Schools.* George Peabody College for Teachers Contribution to Education, No. 184. Nashville, Tennessee: George Peabody College for Teachers, 1937. Pp. xiv+160.

Reviews the legal principles governing practice teaching in teachers' colleges, analyzes a number of existing contracts and agreements between college and public-school authorities, and proposes legal principles and needed legislation that should govern practice teaching.

678. AMBROSE, LUTHER M. "The Training of Teachers of Science in Kentucky," *School Science and Mathematics*, XXXVIII (February, 1938), 126–33.

[1] See also Item 263 (McEachern) in the list of selected references appearing in the March, 1938, number of the *School Review*, Item 293 (Wallin) in the May, 1938, number of the *Elementary School Journal*, Item 525 (Hunt) in the October, 1938, number of the *Elementary School Journal*, and Item 545 (Altstetter) in the November, 1938, number of the *School Review*.

Presents the results of a study "of the conditions, requirements for certification, and possible standards" of teacher-training curriculums in the field of science.

679. AMERICAN ASSOCIATION OF TEACHERS COLLEGES. *Seventeenth Yearbook, 1938.* Oneonta, New York: Charles W. Hunt, Secretary (% State Normal School). Pp. 190.

Reports the proceedings of the annual association meeting held in Atlantic City, in February, 1937.

680. BARNES, RICHARD A. "Institutional Teacher Placement and Service," *Elementary School Journal*, XXXVIII (March, 1938), 528–38.

Summarizes replies to a questionnaire sent to 307 superintendents of schools in Michigan to secure information of value to teacher-training institutions in improving the quality of their service to graduates.

681. BOND, G. W. "Teacher College Deans," *Educational Administration and Supervision*, XXIII (December, 1937), 698–706.

Lists forty-five duties of college deans as revealed by six previous studies and discusses the relationships of a dean within the college.

682. BRIGHT, HAROLD. "The Place of Self-analysis, Self-evaluation, and Self-improvement in a Teacher-training Program," *Educational Administration and Supervision*, XXIII (November, 1937), 561–70.

Emphasizes the importance of self-analysis and evaluation in improving teaching efficiency and describes practical steps in self-improvement.

683. BROWN, EDWIN J., and ANDERSON, DALTON. "Vocational Expectations of Teachers College Students," *School and Society*, XLVII (June 4, 1938), 742–44.

Reports the results of a study of 1,410 students enrolled in the Kansas State Teachers College, Emporia, in the autumn of 1937.

684. BROWN, HARRY ALVIN. *Certain Basic Teacher-Education Policies and Their Development and Significance in a Selected State.* Teachers College Contributions to Education, No. 714. New York: Teachers College, Columbia University, 1937. Pp. vi+184.

Describes the policies and the procedures in teacher education in New Hampshire at different periods and summarizes significant results from the use of these policies.

685. CARMICHAEL, R. D. "Subject-Matter Preparation of High School Teachers," *School and Society*, XLVII (June 18, 1938), 777–81.

Discusses issues raised by the report of a committee of the North Central Association on "Inadequacies in the Subject Matter Preparation of Secondary School Teachers and Suggestions for Their Correction" (Item 704 in this list).

686. CONNETTE, EARLE. "A Survey of the Preparation of Public-School Music Teachers," *Educational Administration and Supervision*, XXIII (September, 1937), 433–46.

Presents evidence concerning the programs provided for prospective teachers of music. Based on analysis of the courses of sixty-seven institutions that offer four-year curriculums.

687. CONNETTE, EARLE. "The Technique of the Individual Conference in Supervision and Critic Teaching," *Educational Administration and Supervision*, XXIV (May, 1938), 368–81.

Emphasizes the importance of individual conferences and criticisms; the characteristics of a good criticism; the procedures for an individual conference, and the relations between visitation, conference, and demonstration teaching.

688. CONNOR, MILES W. "The Facilities and Practices of Negro Tax-supported Teacher-training Institutions," *Journal of Negro Education*, VI (October, 1937), 623–27.

Summarizes the results of a survey to determine the adequacy of present facilities and practices of laboratory-school departments and presents recommendations for improving them.

689. COOK, KATHERINE M. *Opportunities for the Preparation of Teachers of Children of Native and Minority Groups*. United States Office of Education Pamphlet No. 77 (1937).

Lists the institutions that provide training and describes the types of courses offered.

690. COREY, STEPHEN M. "Attitudes toward Teaching and Professional Training," *Educational Administration and Supervision*, XXIII (October, 1937), 521–27.

Summarizes the results of "an attempt to determine whether university students preparing for teaching . . . . change their attitudes toward their chosen profession during the course of their training."

691. CRANE, ESTHER. "Government Grants To Prepare Teachers for English Secondary Schools," *School Review*, XLV (December, 1937), 750–63.

Describes the plan of government subsidy in England and considers the question of whether governmental appropriations hamper freedom of experimentation.

692. CUBER, JOHN F. "Community Training in the Preparation of Teachers," *Educational Administration and Supervision*, XXIV (May, 1938), 382–88.

Recommends that programs for teachers provide for the development of appreciation "of the nature, composition, facts, and changes involved in 'community life' " and of the teachers' responsibility "for the direction of orderly community change."

693. DEAN, CHARLES D. "Predicting Sight-singing Ability in Teacher-Education," *Journal of Educational Psychology*, XXVIII (November, 1937), 601–8.

Summarizes the results of the Seashore Tests of Musical Talent given to entering students in a teachers' college.

694. DIEMER, GEORGE WILLIS. "The Function of the American Teachers College," *School and Society*, XLVII (February 12, 1938), 198–203.

Identifies three major functions of teachers' colleges in a democracy.

695. DONOVAN, H. L. "Program for the Education of Southern Teachers," *Peabody Journal of Education*, XV (March, 1938), 246–51.

Emphasizes the importance of an educated teaching staff and discusses some of the characteristics of the education that teachers need.

696. EELLS, WALTER CROSBY. "A University Course on 'The American College,'" *Journal of Higher Education*, IX (March, 1938), 141–44.

Describes the scope and content of a course for prospective college teachers and summarizes students' evaluations and comments.

697. ELIASSEN, R. H., and ANDERSON, EARL W. "Investigations of Teacher Supply and Demand Reported in 1937," *Educational Research Bulletin*, XVII (May 11, 1938), 132–36.

Summarizes the results of twenty-three investigations of teacher supply and demand reported in 1937.

698. FLOWERS, J. G. (Compiler and Editor). *Supervisors of Student Teaching: Eighteenth Annual Session.* Lock Haven, Pennsylvania: J. G. Flowers (% State Teachers College), 1938. Pp. 110.

Includes the papers read at the Atlantic City meeting of the association and an annotated bibliography relating to student teaching for the period from November, 1936, to December, 1937.

699. GEMMILL, ANNA M. *An Experimental Study at New York State Teachers College at Buffalo To Determine a Science Program for the Education of Elementary Classroom Teachers.* Teachers College Contributions to Education, No. 715. New York: Teachers College, Columbia University, 1937. Pp. viii+74.

Outlines the types of training recommended following a comprehensive survey of conditions in sixteen representative institutions in ten states and a study of materials, procedures, and the psychology and the philosophy of curriculum-building.

700. GRAY, WILLIAM S. "The Preparation of Teachers of Chemistry," *Journal of Chemical Education*, XIV (October, 1937), 466–71.

Considers the nature of the general education, specialized academic training, and professional preparation of prospective teachers of chemistry.

701. HENDERSON, ELISHA LANE. *The Organization and Administration of Student Teaching in State Teachers Colleges.* Teachers College Contributions to Education, No. 692. New York: Teachers College, Columbia University, 1937. Pp. vi+126.

Reports the results of studies made in thirty-seven colleges to discover present practices in the organization and the administration of student teaching and to evaluate the procedures identified in the light of present theory and practice.

702. HILL, RALPH. "Do State Requirements Discourage Educated Persons from Teaching?" *Proceedings of the Fourteenth Annual Educational Conference and the Third Annual Meeting of the Kentucky Association of Colleges and Secondary School*, pp. 46–49. Bulletin of the Bureau of School Service, College of Education, University of Kentucky, Vol. X, No. 2. Lexington, Kentucky: University of Kentucky, 1937.

Discusses the issue briefly and describes steps taken to set up a more objective and extensive appraisal of candidates for teaching.

703. HURD, A. W. "A Synthesis of Survey Concepts in the Field of Teacher Preparation," *Educational Administration and Supervision*, XXIV (May, 1938), 355–59.

Presents a series of twenty principles "which . . . . might serve as criteria for directing efforts in planning for better teacher preparation."

704. *Inadequacies in the Subject Matter Preparation of Secondary School Teachers and Suggestions for Their Correction.* A Complete Report of the Committee on the Subject Matter Preparation of Secondary School Teachers of the North Central Association of Colleges and Secondary Schools. Ann Arbor, Michigan: North Central Association of Colleges and Secondary Schools (1439 Elementary School Building), 1938. (Also in *North Central Association Quarterly*, XII [April, 1938], 439–539.)

Includes the results of the studies and the recommendations of the North Central committee.

705. IRWIN, HARRY N. "The Organization of Teacher-Preparation in a University," *Educational Administration and Supervision*, XXIII (September, 1937), 454–60.

Compares two plans of university organization for the preparation of teachers and presents excerpts from critical statements concerning those plans by thirteen recognized leaders in teacher education.

706. JOHNSON, J. K. "Training Teachers for the New Generation," *Texas Outlook*, XXII (March, 1938), 23–24.

Discusses five essential requirements of teachers: (1) "personality," (2) "language ability," (3) "orientation in the culture in which one is teaching," (4) "command of specific subject matter," (5) "a basic understanding of psychology and of the technical principles of the teaching art."

707. JONES, W. C. "State Requirements Do Not Discourage Educated Persons from Teaching," *Proceedings of the Fourteenth Annual Educational Conference and the Third Annual Meeting of the Kentucky Association of Colleges and Secondary Schools*, pp. 50–55. Bulletin of the Bureau of School Service, College of Education, University of Kentucky, Vol. X, No. 2. Lexington, Kentucky: University of Kentucky, 1937.

Presents several arguments in support of the proposition that state requirements do not discourage educated persons from teaching.

708. KLONOWER, HENRY. "Fundamentals of an American Teacher Education Program—Co-operation and Co-ordination." *The Role of Research in Educational Progress*, pp. 154–62. Official Report of the American Educational Research Association, 1937. Washington: American Educational Research Association of the National Education Association, 1937.

Discusses a series of problems faced in developing an adequate program of teacher education in this country.

709. "The Laboratory School of the Indiana State Teachers College," *Teachers College Journal*, IX (November, 1937), 17–42. Terre Haute, Indiana: Indiana State Teachers College.

Describes the physical plant and its environment and presents a statement of the philosophy of the program of the school.

710. "Levels of Training and Training Requirements for Teachers in 186 City School Systems." Educational Research Service, Circular No. 8, 1937. Washington: American Association of School Administrators and Research Division of the National Education Association, 1937. Pp. 26.

Reports the number of years of training or the academic degrees held by elementary- and secondary-school teachers in cities with populations between thirty thousand and one hundred thousand and in cities with populations of more than one hundred thousand.

711. LINDEN, ARTHUR V., and PUGMIRE, D. ROSS. "Some Problems of Student Teaching in a Metropolitan Area," *Teachers College Record*, XXXIX (May, 1938), 723–33.

Discusses important aspects of a student-teaching program, difficulties arising from varying state requirements, and the program of student teaching at Teachers College, Columbia University.

712. MCCONNELL, ROBERT E. "Teacher-training Appropriate for the Modern School," *Educational Administration and Supervision*, XXIV (January, 1938), 11–16.

Emphasizes the importance of "a broad general education supplemented by many cultural contacts" and "a thorough and progressive professional education couched in a consistent theory and practice."

713. MACPHAIL, ANDREW H. "Textbooks for Introductory Courses in Education: An Analysis of Their Content," *Educational Administration and Supervision*, XXIV (January, 1938), 50–54.

Presents an analysis of twenty textbooks intended for use in general introductory courses in education to determine the distribution in emphasis among eight topics.

714. MADDEN, RICHARD. "The Organization and Practices of the Psycho-educational Clinic in State Teachers Colleges," *Educational Administration and Supervision*, XXIII (December, 1937), 707–12.

Summarizes replies from 102 teachers' colleges emphasizing such matters as the frequency of occurrence of psycho-educational clinics, official designation, personnel, type of service rendered, financial provisions, legal status, psychological apparatus, and problems and needs of the clinic.

715. MAJOR, C. L. "The Percentile Ranking on the Ohio State University Psychological Test as a Factor in Forecasting the Success of Teachers in Training," *School and Society*, XLVII (April 30, 1938), 582–84.

Compares the percentile ranks on the psychological test and the composite work in student teaching of 122 Seniors of Denison University.

716. MAXWELL, P. A. "Student Activities in Education Courses," *Educational Administration and Supervision*, XXIII (October, 1937), 528–40.

Presents a classification of the learning activities suggested in the sixty educational books selected annually by the Enoch Pratt Free Library of Baltimore during the decade 1926–35.

717. MEAD, A. R. "Concepts and Principles Involved in the Individual Conference in Supervision of Student-teaching: A Jury Judgment," *Educational Administration and Supervision*, XXIV (February, 1938), 94–104.

Judgments expressed by forty-five representative writers on supervision and by directors and supervisors of student teaching were used as a basis of a list of concepts and principles underlying individual conferences in the supervision of student teaching.

718. MEISTER, RICHARD. "Teacher Training in Austria," *Harvard Educational Review*, VIII (January, 1938), 112–21.

Presents a general survey of the Austrian educational system, attempts to give insight into the professional training of elementary-school teachers, and describes the main features of the program of education for secondary-school teachers.

719. MOONEY, EDWARD S., JR. *An Analysis of the Supervision of Student Teaching*. Teachers College Contributions to Education, No. 711. New York: Teachers College, Columbia University, 1937. Pp. viii+160.

Presents the results of "an analysis of the supervisory activities carried on with student teachers in New York State teacher-education institutions preparing elementary-school teachers."

720. MOTT, GEORGE FOX. "The Conference Technique as the Center of the Student-Teacher Induction Process," *Educational Administration and Supervision*, XXIV (January, 1938), 55–60.

Discusses the advantages and the procedures of the conference technique in student-teaching courses.

721. ORR, M. L., and ANDERSON, A. C. "An Experiment in Integrating a Teacher-training Curriculum," *Educational Administration and Supervision*, XXIV (February, 1938), 105–12.

Describes the effort of the Education Department at Alabama College "to integrate and make more functional its professional offerings for the training of teachers."

722. PAINTER, WILLIAM I. "The Introductory Course in the Education Curriculum," *School and Society*, XLVI (November 13, 1937), 612–17.

Presents arguments for and against an introductory course in education and outlines eighteen topics under which the questions asked by instructors in such courses may be classified.

723. PALMER, ARCHIE M. "Courses in Higher Education," *Journal of Higher Education*, IX (June, 1938), 293–300.

Reports opportunities for college and university administrators and faculty members to study teaching and administrative problems during the summer sessions of 1938.

724. PERSONNEL GUIDANCE COMMITTEE (Milwaukee State Teachers College). "Suggested Directions for Faculty Counselors," *Educational Administration and Supervision*, XXIV (May, 1938), 321–37.

Presents specific suggestions growing out of faculty conferences which are presented under the following headings: "Interviewing a Student," "Counseling Records," "Student Problems," "Study Guidance," and "Guidance in Extracurricular Activities."

725. REGIER, AARON J. "A Study of the Functioning of Teacher Certification Laws and Regulations in Kansas in 1933–1934," *University of Kansas Bulletin of Education*, IV (March, 1938), 4–18.

Analyzes and evaluates the present status of the Kansas certification laws and regulations and presents evidence of the amount of academic preparation of Kansas secondary-school teachers in the fields in which they are teaching.

726. REINHARDT, EMMA. "Some Economic Aspects of Attendance at a Teachers' College," *Elementary School Journal*, XXXVIII (November, 1937), 206–9.

Summarizes data from 767 students concerning expenditures for a school year, sources from which money was obtained, and the kind of work done to earn part or all of college expenses.

727. RIED, HAROLD O., and ROSENLOF, GEORGE W. "Teacher-training in Junior Colleges," *Junior College Journal*, VIII (April, 1938), 347–51.

Summarizes the results of a study of 451 junior colleges to determine the curricular offerings for the professional preparation of teachers.

728. RYAN, HEBER HINDS. "The Practice-teaching Load in Laboratory Schools," *Educational Administration and Supervision*, XXIV (February, 1938), 143–46.

Presents data secured from sixty-five universities and teachers' colleges in the territory of the North Central Association of Colleges and Secondary Schools.

729. SHULER, EUCEBIA. "The Professional Treatment of Freshman Mathematics in Teachers Colleges," *School Science and Mathematics*, XXXVII (April, 1937), 464–72; "Application of Professional Treatment to the Quadratic Function," ———, (May, 1937), 536–48; "Application of Professional Treatment to Logarithms," ———, (October, 1937), 782–94.

Defines professional treatment of subject matter, considers the status of Freshman mathematics in teachers' colleges in the light of this definition, and shows its application to the teaching of quadratics and logarithms.

730. SNITZ, REUBEN H. "An Analysis of the Sheet-Metal Worker's Trade and a Curriculum for the Training of Teachers of Sheet-Metal Work in Industrial Arts Courses," *Teachers College Journal*, IX (January, 1938), 43–74. Terre Haute, Indiana: Indiana State Teachers College.

Reports the results of an occupational analysis and the applications of findings to curriculum-making.

731. STODDARD, ALEXANDER J. "A Hundred Thousand New Teachers Every Year," *Educational Record*, XIX (April, 1938), 141–57.

Describes the enormousness of the task of preparing an adequate supply of teachers and discusses basic problems in the selection of subjects for teacher education and in the pre-service and in-service preparation of teachers.

732. STUIT, DEWEY B. "Scholarship as a Factor in Teaching Success," *School and Society*, XLVI (September 18, 1937), 382–84.

Reports the relation between scholarship as measured by university marks and teaching success as evaluated by principals and superintendents.

733. STUIT, DEWEY B. "Can We Counsel the Student concerning His Probable Success in Teaching?" *Educational Administration and Supervision*, XXIII (December, 1937), 684–93.

Discusses the problem in the light of conflicting evidence from experimental studies and emphasizes the importance of scholarship and personality in predicting teaching success.

734. STUMPF, W. A. "Graduate Work in State Teachers Colleges," *School and Society*, XLVI (December 25, 1937), 834–38.

Presents the results of an analysis of the extent and the character of the offerings in state teachers' colleges leading to a higher degree.

735. "Subject Matter Preparation of High School Teachers," *North Central Association Quarterly*, XII (October, 1937), 230–82.

Includes eight reports bearing the following titles: "Preparation of Teachers of Social Studies," by A. C. Krey; "The Preparation of High School Teachers of English," by Franklin Snyder; "Progress Report of the Committee on Subject-Matter Preparation of Secondary School Teachers," by F. E. Henzlik; "Implications of Present Curriculum Trends in Secondary Education for the

General and Specialized Preparation of High School Teachers," by Matthew H. Willing; "Discussion of the Foregoing Papers," by Charles H. Judd; "Judgments of High School Teachers concerning the Academic Preparation of Secondary School Teachers," by H. H. Hagen; "Do 'Good' Teachers Produce 'Good' Results?" by Oliver H. Bimson; "Mutual Responsibilities Involved in Educating Teachers," by Charles W. Knudsen.

736. ULICH, ROBERT. "On the Reform of the Higher Education of Teachers," *Educational Forum*, II (November, 1937), 5–15.

Considers significant deficiencies in current programs of teacher education and discusses basic reforms essential to the improvement of higher education for teachers.

737. VAN DEN BERG, LAWRENCE H. (Compiler and Editor). *Problems in Teacher-training*, Vol. XII. Proceedings of the 1937 Spring Conference of the Eastern-States Association of Professional Schools for Teachers. New York: Prentice-Hall, Inc., 1937. Pp. xviii+360.

Includes papers presented before administrative and instructional divisions, sectional meetings for faculty members, and student-faculty and student groups.

738. VAN PATTER, V. E. "The Unsolved Problem of Professionalizing the State Teachers Colleges," *Educational Administration and Supervision*, XXIII (November, 1937), 599–611.

Characterizes the training procedures at three successive periods in the history of institutional teacher training in the United States and raises pertinent questions concerning the nature of future curriculums for teachers.

739. WERT, JAMES E. "The Function of Graduate Education in a Teachers' College," *Educational Research Bulletin*, XVII (February 16, 1938), 29–35, 56.

Presents basic issues underlying graduate work for teachers, analyzes the occupational interests of students in one institution, and points out specific problems involved in developing adequate programs for high-school teachers.

740. WOOD, HUGH B. "The Professional Preparation of Teachers," *Journal of Higher Education*, VIII (December, 1937), 485–91.

Discusses the need for a more adequate program of teacher education, the desirable content of such a program, and subsidiary administrative organizations.

741. ZOOK, GEORGE F. "Teacher Education as I See It," *Proceedings of the National Education Association*, LXXV (1937), 612–17.

Gives emphasis to the importance of a clear statement of objectives for the education of teachers and of developing ways and means for prospective teachers to know children.

Educational Writings

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REVIEWS AND BOOK NOTES

RULES AND REGULATIONS IN SCHOOL ADMINISTRATION.—Most books treating city school administration devote one or two chapters to the rules, the regulations, and the functional machinery which guide and control the operation of a school system. A variety of other publications treat specialized phases, such as business management, budgeting, transportation, and pupil personnel. Sears has recently put himself to the task of placing in a single volume[1] a brief treatment of the best modern thought regarding various phases of a city school administrative code and a comprehensive, detailed outline of the essential features of the rules and regulations under which a school system might well operate. The book presents a "unified picture of the entire system of controls and directions necessary in the operation of a city school system, showing, on the one hand, how these controls attach to the superior authority that resides in the state, and, on the other, how they attach to the services the schools are to render to the children and the community" (p. 29). The treatment of the field of administration is restricted to those controls that are exercised by the board of education through its rules and regulations and its special administrative instruments.

The book is divided into four parts. Part I, entitled "The Field and the Factors of a Control System," treats the problem of school control and the theory and principles of legislative and administrative controls of schools. It is a brief but straightforward discussion of the state's responsibility for, and control of, public education, the interrelation between the duties and powers of the state and those of local school boards, and the source and the scope of authority of the local board. Part II, entitled "Board Regulations," discusses the preparation of a book of rules and regulations and then devotes seventy pages to a rather complete book of rules and regulations. Part III, called "Special Administrative Instruments," gives consideration to business forms, curriculums, standards of class size, accounting and report procedures, budgeting, contracts and specifications, ranking systems for all positions of employees, eligible lists, retirement, salary and wage schedules, depreciation formulas, pay roll, regulations covering the use of school properties, and the minute-book of the board.

[1] Jesse B. Sears, *City School Administrative Controls: An Analysis of the Nature, Placement and Flow of Authority and Responsibility in the Management of a City School System.* New York: McGraw-Hill Book Co., Inc., 1938. Pp. xviii+282. $2.50.

These special instruments are regarded, "not as general and permanent rules, but rather as special expressions or interpretations or formulas for interpreting such rules, being made to fit the special needs and conditions of the present time only" (p. 166). Part IV deals with "Pupil Management Controls" and gives consideration to attendance, progress records, textbooks, libraries, supplies, and equipment.

The book is a technical but very readable treatise on the mechanics—yes, the "paper" mechanics as the author puts it—of city school administration. In the areas in which the controls of the board of education are exercised, it sets up the routine machinery of school management in the light of modern concepts of education and of school administration. The volume is well done and ought to be helpful to administrators and school boards struggling with administrative problems.

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THE SHADOW IN THE BACKGROUND.—That the role of emotions in education is of transcendent importance has long been recognized. That either psychologists or educators have had an adequate understanding of the nature of emotional behavior or could intelligently guide the emotional development of children could scarcely be claimed. A recent noteworthy attempt to bring order out of chaos has been made by a committee of the American Council on Education, and their first report[1] has appeared. The statement that a particular book should be read by every teacher is so common that one hesitates to repeat it; yet the reviewer has seen few, if any, books during the past year which so nearly deserve such a comment as does this report.

Although the report is written by one person, the committee "included persons known to be competent in experimental psychology, in psychiatry, in anthropology, in sociology, in child study, in educational psychology and educational research, in experimental education, in educational philosophy, in the education of teachers, and in educational administration" (pp. ix–x). The effect of this wide selection of members is apparent in the report. Its content is only partially indicated by chapter headings. Using the word "affect" as a generic term to cover feeling and emotion, the committee has surveyed comprehensively the evidence concerning basic affective phenomena and the physiological basis of affective experience and behavior; the "trainability" of affective behavior; personality needs and conditions which frustrate them; influence of affective behavior on learning; and also aspects of education in relation to affective phenomena needing study, including a separate chapter—one of the best—on personnel problems in education.

[1] Daniel Alfred Prescott, *Emotion and the Educative Process.* A Report of the Committee on the Relation of Emotion to the Educative Process. Washington: American Council on Education, 1938. Pp. xviii+324. $1.50.

The report does not attempt to present "dicta which should be followed by school people" (p. 5). Rather the committee attempted to survey the available evidence on the basis and the nature of affective experiences and their role in the educative process. Numerous implications for education, many of which have some immediate value, are set forth at the ends of various chapters.

While showing evidence of scholarship and caution in drawing conclusions, the report is not a dry, academic volume. It is intensely interesting and does not avoid coming to grips with social and economic problems in relation to emotional or affective development and behavior. A few quotations will illustrate.

> Insecurity and fear of insecurity are widespread. The insecurities most generally met or feared are loss of opportunity to work, illness, old age without income, and poverty [p. 146].
>
> The amount of frustration of personal goals occasioned by these racial and national prejudices is tremendous [p. 155].
>
> This [a state of international anarchy] gives rise to an emotionalized nationalism that is a constant threat to the peace of the world [p. 156].
>
> The net result is that our schools are manned in the main by very young, relatively inexperienced women who have not yet chosen a mate, by spinsters who could not achieve a normal love life, by women whose homes have been broken . . . . [p. 255].

These quotations do not represent the content of the book but only show that the report, though based on a tremendous amount of study and data, is stimulatingly presented.

No single theory of the role of affective experience in education has been accepted, for example, the theory of Kurt Lewin in his *Dynamic Theory of Personality* (New York: McGraw-Hill Book Co., Inc., 1935), although the committee takes the Gestalt contribution into consideration. As the report points out, much research is still needed. It is to be hoped that this report will eventuate in a more forthright attack on the problem. For, although in some cases the implications pointed out above have immediate values, they do not point the way to the role that education is to play in developing the emotional life of the child. We know little about children's needs, especially their affective needs. The shadow of our ignorance still falls darkly over educational methods and materials.

A. H. Turney

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How To Use Psychological Principles in the Classroom.—During the past fifteen years textbooks entitled "Psychology of Learning" have been relatively few, the trend having been to treat the psychology of learning as one of a diversified list of topics under the general heading of educational psychology. Educational psychology has tended to become increasingly more educational in material and viewpoint and to contain less matter of the general-psychology type.

Race's textbook[1] in the psychology of learning for teachers departs somewhat from these trends in that the primary aim seems to have been to present an overview of both general and educational psychology, without expecting any previous background or training. The book treats such topics as the nature of human behavior, neural connections, drives and motives, intelligence, attention, various types of learning (trial and success, rote and logical learning, problem-solving), individual differences, personality, mental hygiene, and creative expression. The title obviously represents the author's desire to correlate the principles of psychology with actual schoolroom problems and experiences. As a means of emphasizing this point of view, pictures are presented of children at work on classroom projects in which the principles of learning by doing operate. The Preface acknowledges that the psychology is that of the connectionist school developed by Thorndike and the philosophy that of the pragmatic school represented by Dewey.

In the main the author has succeeded in her purpose of making educational applications of psychological knowledge. Unfortunately, however, laboratory data have been made the basis for several applications which might have been more convincing and practical if experimental data on activities of children under schoolroom conditions had been more liberally used. Some chapters present findings of the psychological laboratory relating to acquisition and retention of meaningless materials when investigations dealing with the psychology and the learning of school subjects could have been more effectively employed.

The book is clearly written, and each chapter is followed by questions and references for further study. Although probably not sufficiently comprehensive to serve as a basic textbook, the book provides valuable supplementary reading for an introductory course in educational psychology. The fact that it presupposes no background in general psychology should assure it a place of usefulness as reading for teachers, parents, and lay discussion groups having no such background and wishing only the educational implications of psychology.

ROBERT A. DAVIS

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THE PSYCHOLOGY AND BEHAVIOR OF YOUNG CHILDREN.—The latest volume from the pen of Arnold Gesell and his collaborators[2] is one of a series of brilliant books and researches which have come from the Yale Clinic of Child Development and which are outstanding in the field. The present work is particularly related to the author's earlier *The Mental Growth of the Preschool Child* (New

[1] Henrietta V. Race, *The Psychology of Learning through Experience.* Boston: Ginn & Co., 1938. Pp. viii+384. $2.00.

[2] Arnold Gesell and Helen Thompson, assisted by Catherine Strunk Amatruda, *The Psychology of Early Growth: Including Norms of Infant Behavior and a Method of Genetic Analysis.* New York: Macmillan Co., 1938. Pp. x+290. $4.00.

York: Macmillan Co., 1925), *An Atlas of Infant Behavior* (New Haven, Connecticut: Yale University Press, 1934), and the Yale films of child development. Articulation with the future is suggested in the projected work on the predictive value of tests in the preschool field—a work which will be eagerly awaited.

The work under consideration is both a research monograph and a handbook. Part I deals with the scope of the study, the characteristics of the infants studied, the examining equipment, and the general and specific methods and procedures used in the normative survey. Part II contains, largely in complete tabular form, the normative summaries for each age level. These normative values are described in terms of situations and maturity levels and in the form of seven functional categories: (1) specific postural activities, (2) gross postural activity, (3) regard, (4) prehension, (5) manipulation, (6) adaptation, and (7) language and social behavior. Part III discusses "The Principles of Genetic Analysis," describes in detail the "Analytic Developmental Schedule," and concludes with procedures for developmental diagnosis and prognosis. Six appendixes present a comparison and evaluation of behavior maturity by different methods, a bibliography of the Yale films of child development, an inclusive route schedule of behavior situations, clinical and research record forms, normative summaries of preschool development, and a glossary. A well-arranged and complete index completes the volume.

The Psychology of Early Growth follows the highly commendable procedure of presenting all the data collected, so that others may check the conclusions reached and use any desired data for further research. The authors are also to be complimented on a very clear presentation of the methods and the procedures by which their data were collected. The need for better original data, rather than for more elaborate statistical treatment of inferior or incomplete data, is clearly seen. The section on the limitations of statistical treatment of data in this field is well worth the reading time of all interested in the scientific study of child development. Throughout, the volume stresses patterns of growth as well as developmental levels. Persons interested in child development at all ages would do well to study and to ponder the principles and the considerations laid down with respect to patterns of growth. A clear presentation of a new method of genetic analysis is an important contribution. The format of the book is particularly attractive and legible.

In reviewing a volume so full of merit as is this publication, one might well leave out criticism. To complete the evaluation, however, the reviewer must mention that, regrettably, the authors did not see fit to compare their work with similar research at Minnesota, Iowa, California, and other centers which have made important contributions in the field. Such a comparison would have been of great interest to many workers. There are also those who would like to have the Yale group tackle the problem of discovering the factors involved in the process called "maturation" and who would like more data on the possibilities and the consequences of speeding up developmental levels. These considera-

tions in no way alter the fact that the book is clearly a notable contribution in the field of child development. It should prove of great value to intelligent parents and teachers generally, as well as to research workers in the field.

KAI JENSEN

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A HISTORY OF AMERICAN CIVILIZATION FOR THE UPPER GRADES.—Roy F. Nichols has joined with two textbook authors of long experience, William C. Bagley and Charles A. Beard, in preparing a two-volume series[1] dealing with the development of American civilization. The first volume, *America Yesterday*, begins with the founding of the English colonies in the New World and ends with the American Civil War and reconstruction period. In organization it follows, in a general way, the chronological development of the colonies and the states. The chapter headings, however, are often original and challenging. Adequate attention is given to economic, social, cultural, and educational trends. The second volume, entitled *America Today*, is a study of the passing of the frontier, the rise of big business, the development of American culture, and the World War and its aftermath. The recent appearance of these books (the first volume was published in January and the second in February, 1938) enables the authors to bring the story down to the immediate present. The last three chapters of the second volume deal with the panic of 1929, the New Deal of the Franklin Roosevelt administration, and the problems now rising to challenge the American people. The second book departs rather widely from a chronological sequence—a departure which is fully justified and, in fact, made necessary by the growing complexity of our institutions.

These books are well written and will be interesting to young people of junior high school age. There is an abundance of excellent maps. The books have an ample number of illustrations, a few of which are colored but most of which are black-and-white drawings. Since in no case is a sentence added to describe the picture, the meaning of many illustrations is obscure. For example, on pages 101–2 of Volume II appears a drawing which perhaps is intended to suggest William Jennings Bryan delivering his "Cross of Gold" speech. Few elementary-school teachers and still fewer pupils would be likely to recognize the subject. Nearly all these drawings, however, have the merit of being action pictures. In most cases the picture is placed close to the textual material with which it is connected. In a few cases a name or a phrase is appended to the picture. For example, the name Franklin D. Roosevelt appears below a black-and-white drawing of the President. This addition is fortunate because without it nobody would guess whom the drawing was intended to represent. It is surprising also that little use is made of contemporary cartoons.

[1] Roy F. Nichols, William C. Bagley, and Charles A. Beard, *America Yesterday*, pp. vi+416+lvi; *America Today*, pp. viii+410+lvi. New York: Macmillan Co., 1938. $1.40 each.

At the end of each chapter the authors have provided a group of review exercises, questions, suggested activities, references for library reading, topics for special study, suggested outlines, maps to be drawn, and other helpful material generally classed as methodology. At the end of each book appears an appendix. In Volume I this appendix includes the familiar material: the Declaration of Independence, the Constitution of 1787, and a most valuable bibliography including subject-matter material for the teacher, a suggested professional library for the teacher, and a reference list of readings for pupils. The teacher's professional library refers to some of the best and the most recent books on the subject of the teaching of the social studies. An excellent index is included. In Volume II the Appendix for Volume I is repeated in part, the Declaration of Independence and the Constitution being reprinted, but the bibliographical material includes books bearing specifically on the more recent period of American history.

These books have a very pleasing external appearance, and the binding is strong and attractive. The two volumes will be a welcome addition to the textbook libraries of many schools.

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Instruction in the Use of Libraries for Intermediate Grades.—The increasing breadth of the modern curriculum has made the library an indispensable part of the school. In order to utilize library facilities to the fullest extent, children must have some definite instruction in how to use books and other available sources of information. A textbook[1] has recently appeared which is designed to guide children in mastering the techniques necessary to effective use of books and libraries.

This material had been tried out for several years before publication by the children of the William Land Elementary School in Sacramento, California. The children of this school helped to make the pictures, many of which are amusing and instructive illustrations of the cartoon type. The vocabulary is suitable for children of the intermediate grades, and the makeup of the book will appeal to them.

The book contains fifty-four brief chapters and discusses many phases of library technique, as well as the use of reference books, maps, etc. Among the many topics treated are: how to open a new book; how books are arranged in libraries; the Dewey decimal system; parts of books; the card catalogue; John Newbery Medal books; how to make a bibliography; helps for using an encyclopedia; and the many uses of the dictionary. At the close of each chapter a few questions are given to test the reader on the content. In most chapters refer-

[1] Carolyn Mott and Leo B. Baisden, *The Children's Book on How To Use Books and Libraries*. New York: Charles Scribner's Sons, 1937. Pp. 208. $1.28.

ence is made to the *Children's Library Lesson Book*, a workbook which may be used in conjunction with the textbook.

The text is addressed directly to the children and indicates that they can master the content by working independently. While this friendly approach will stimulate their interest, children using the book without guidance and much supplementary class work will often be confused. So much material is included in the small book that facts are necessarily presented in quick succession and are not always sufficiently clarified. The book seems to lack the careful organization desirable in discussing library science. The subject is not treated so thoroughly as it might be; much is touched on but not sufficiently expanded. One example of the light touch is found in chapter xxxvi, "Some Useful Parts of a Book." After several terms have been defined, the following paragraph appears: "Have you an appendix? Did you know that many books have an APPENDIX? Has this book an appendix?" (P. 149.) There is no other reference to "appendix" in the book.

In the discussion of title cards on page 71 mention is made of the fact that "a" and "the" at the beginning of titles are disregarded when cards are filed, but no mention is made of "an," which is usually treated as are the other articles. "A" and "the" are spoken of as "baby words."

The book will be of value in many schools if the material is adapted to their particular needs.

EVANGELINE COLBURN

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PICTURES OF SOCIAL LIFE IN AMERICA.—In simple yet charming language Miriam E. Mason[1] has told what happened to three widely separated generations of one family. The first Waynes made the journey in 1817 from Virginia to Indiana and on the hillside built the log house that became the family seat. The story of how they built and furnished their cabin, provided themselves with food and clothing, entertained neighbors, started a school, and carried on the activities of a pioneer community makes up the first section of the book. In the second part the author presents a vivid picture of the daily life of the Waynes who lived at Smiling Hill Farm in the decade between 1847 and 1857. As the family ride over the pike in the Red Lion, take an exciting journey at fifteen miles an hour on the new railroad, light their first kerosene lamp, prepare a meal on the new cookstove, and thresh the wheat with a steam threshing machine, the reader is led to contrast these improved ways of living with the simpler ways followed by the earlier Waynes. The last section tells what a new generation of Waynes found when they moved to the old homestead in 1935. In the modern house that stood at the foot of the hill, in the up-to-date dairy barn, along the

[1] Miriam E. Mason, *Smiling Hill Farm*. Boston: Ginn & Co., 1937. Pp. viii+312. $1.60.

paved highway that ran in front of the farmhouse, and over the air line that passed above it, the young Waynes found the latest and most modern ways of life—but the same old hillside smiled in the sunshine calling still for pioneers. In her closing page the author presents this call through the musings of young Ken Wayne. "There will always be new, hard things to do," thought Ken, "but there will always be ways of doing them. There must be pioneers to find the ways. I am glad."

This little volume will be welcomed by children because it tells a pleasant story of life in other days. It will be welcomed by teachers because it provides not only interesting recreational reading but splendid background material for social studies. The book is written in very simple language, and new concepts are explained when they are introduced. There is a wealth of information that should prove useful in any study of America. The story which is the connecting thread is rather slight, there being practically no plot but only a recital of facts about the many members of the Wayne family. In spite of this lack, however, the book makes a distinct contribution in presenting in childlike language a story of evolving social life in America.

Another book[1] treating of the social scene, but at a higher grade level, is concerned with the romance of the railroad. If the long sweep of a railroad track is a call to you to be up and away, you will understand the spirit that pervades this book about trains. The author not only has given much valuable information but has presented railroad-building as a fascinating romance of the modern world. He has caught not only the importance of the railroad as a material aid but its importance in bringing people of all lands closer together. As he says in his concluding sentences, " 'Who is thy neighbor?' was asked two thousand years ago. And the railroads answer: 'Everyone; the world is very small.' "

The book is divided into twelve chapters, most of which have titles intriguing the reader's curiosity, for example, "The Little Locomotive That Went to Sea" and "This Train Niver Shtops!" Ten of these chapters relate in a more or less connected way the story of railroad-building in the United States. One deals with the invention of the locomotive by Stephenson in England, while the last chapter tells something of famous railroads in distant countries. Such matters as the perfection of air brakes, the construction of Pullman cars, and the arrangement of the block-signal system are also related.

The book presents many facts and numerous amusing anecdotes. It is profusely illustrated with photographs. Wide margins and short paragraphs give it an easy and inviting appearance. The use of black-face type is unusual and perhaps not an asset, since this style of type appears to be smaller than it actually is. The author's style is interesting but not designed to produce a well-knit narrative—a fact which makes it necessary for the reader to keep before him the main purpose of the book lest he become lost in a mass of details and a series

[1] Charles Gilbert Hall, *Through by Rail.* New York: Macmillan Co., 1938. Pp. 152. $1.32.

of anecdotes. Fortunately an index has been included, for otherwise it would be difficult to use the book as a ready reference for fact-finding.

As a source of information for classes engaged in a study of transportation and as recreational material for children at the upper intermediate and junior high school levels who like to do factual reading, this little volume should have a wide use.

EDNA MCGUIRE BOYD

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ENGLISH FOR THE ELEMENTARY GRADES.—Teachers always look with interest toward a new textbook which represents a renewed attack on the English problems inherent in elementary instruction. A recent handbook in English,[1] which, according to its authors, is designed for dual use, combines guidance in usage with guidance in the practice of functional English activities:

> The Handbook may be used in any subject or activity in the school program. At the same time, through the use of its diagnostic tests, practice exercises, standards for the measurement of achievement, and its maintenance program of language skills, it can be used effectively as a text for the language class [p. iii.].

One especially commendable feature of the *Handbook* is the introduction, in Grades V and VI, of instruction in the proper use of books, including the use of indexes, tables of content, the library catalogue, and the dictionary. Many teachers will be pleased to see this emphasis on the effective use of "book tools."

Another sound principle which is rather systematically followed throughout the composition chapters of the *Handbook* is the use of specific standards for the judgment of pupils' work. Intelligent self-evaluation is one of the important goals of education, and it can be attained only by affording guidance in the form of definite criteria for self-appraisal.

The weight of emphasis is apparently on usage and mechanics, although the authors express the belief that they have included a "minimum of mechanics" in their materials. In Book II, for example, more than 50 per cent of the content falls under chapter headings such as "Good Usage," "Capital Letters," "Punctuation," and "Sentences." Without quarreling, for the time being, with the weight of emphasis represented by the material of the *Handbook*, one may legitimately raise the question of the wisdom of bulking formal instruction in usage and mechanics in isolated chapters. A psychological organization would seem to demand a close correlation of content and form in the total picture of language instruction. Isolated and formal treatment of the rules of mechanics at early grade levels is an invitation to the method of memorization and formal recitation rather than to the method of habit-forming practice obtained in connection with motivating and interesting content.

The authors have aptly chosen the word "Handbook" as the title of their

[1] R. W. Bardwell, Ethel Mabie, and J. C. Tressler, *Elementary English Handbook:* I, pp. viii+184, $0.68; II, pp. xii+306, $0.80. Boston: D. C. Heath & Co., 1938.

series. It is the reviewer's opinion that the books will function more effectively as handbooks (the first use suggested by the authors) in connection with various activities of the school program than as textbooks in the language classes.

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

Educational Broadcasting, 1937. Proceedings of the Second National Conference on Educational Broadcasting, Held in Chicago, Illinois, on November 29, 30, December 1, 1937. Edited by C. S. Marsh. Chicago: University of Chicago Press, 1938. Pp. xx+388. $3.00.

EVENDEN, E. S., STRAYER, G. D., and ENGELHARDT, N. L. *Standards for College Buildings.* New York: Teachers College, Columbia University, 1938. Pp. x+226. $2.25.

IMUS, HENRY A., ROTHNEY, JOHN W. M., and BEAR, ROBERT M. *An Evaluation of Visual Factors in Reading.* Hanover, New Hampshire: Dartmouth Eye Institute of the Dartmouth Medical School, Dartmouth College, 1938. Pp. 144.

MORGAN, JOY ELMER. *Horace Mann at Antioch: Studies in Personality and Higher Education; Including Horace Mann's Address, Demands of the Age on Colleges; His Dedicatory and Inaugural Address; His Baccalaureate Addresses; Two Antioch Sermons; and Other Material Relating to His Life.* Washington: Horace Mann Centennial Fund, National Education Association, 1938. Pp. 608. $2.00.

MYERS, GARRY CLEVELAND, and SUMNER, CLARENCE WESLEY. *Books and Babies.* Chicago: A. C. McClurg & Co., 1938. Pp. 116. $1.75.

NASH, JAY B. *Teachable Moments: A New Approach to Health.* New York: A. S. Barnes & Co., 1938. Pp. x+244. $1.50.

REDDING, TRACY W. *When Home and School Get Together.* New York: Association Press (347 Madison Avenue), 1938. Pp. x+118. $1.25.

SLACKS, JOHN R. *The Rural Teacher's Work.* Boston: Ginn & Co., 1938. Pp. xvi+414. $2.25.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

BERMAN, SAMUEL; FRYER, JANE EAYRE; and BARNARD, J. LYNN. The Young American Civic Readers: *Community Helpers*, pp. xii+244, $0.72; *Community Activities*, pp. xii+252, $0.76; *Community Interests*, pp. xii+274, $0.80. Philadelphia: John C. Winston Co., 1938.

Books and Library Plays for Elementary and High School Use. Edited by Edith M. Phelps. New York: H. W. Wilson Co., 1938. Pp. 222. $2.25.

CHOATE, ERNEST. *Student's Assignment Book with Study Aids.* Philadelphia: Circle Book Co., 1938. Pp. 96.

DARINGER, HELEN FERN. *Grammar for Everyday Use.* Yonkers-on-Hudson, New York: World Book Co., 1938. Pp. x+338. $1.00.

DEPEW, OLLIE. *Children's Literature by Grades and Types.* Boston: Ginn & Co., 1938. Pp. xiv+706. $3.25.

GILLET, HARRY O., DURELL, THOMAS J., and DURELL, FLETCHER. *The New Trend Arithmetic:* Fifth Year, pp. xvi+336+xxxii; Sixth Year, pp. xvi+336+xxxiv. New York: Charles E. Merrill Co., 1937.

GILLET, HARRY O., DURELL, THOMAS J., DURELL, FLETCHER, and SUELTZ, BEN A. *The New Trend Arithmetic:* Seventh Year, pp. x+372+xxii, $0.80; Eighth Year, pp. x+372, $0.80. New York: Charles E. Merrill Co., 1938.

Haensel and Gretel: The Story of Humperdinck's Opera. Adapted by Robert Lawrence. New York: Silver Burdett Co., 1938. Pp. 40. $0.60.

HERDMAN, T. *Discovering Geography:* Book I, In Britain, pp. viii+152; Book II, Abroad, pp. vi+154. London: Longmans, Green & Co., 1938. $0.75 each.

KING, WILLIAM A., and FULLENWIDER, ELMER D. *The Pacific Northwest: Its Resources and Industries.* Cincinnati, Ohio: South-Western Publishing Co., 1938. Pp. 390.

KUMMER, FREDERIC ARNOLD. *The Great Road.* Philadelphia: John C. Winston Co., 1938. Pp. xii+306. $2.50.

Living Today—Learning for Tomorrow: A Course for the Social Studies from the Kindergarten through the Senior High School—Seattle Public Schools. Prepared by the Social Studies Committee in co-operation with W. Virgil Smith. Seattle, Washington: Seattle Public Schools, 1938. Pp. 144.

Lohengrin: The Story of Wagner's Opera. Adapted by Robert Lawrence. New York: Silver Burdett Co., 1938. Pp. 42. $0.60.

MCCRACKEN, MARY JO. *Always Be Safe.* New York: Macmillan Co., 1938. Pp. 94. $0.48.

MERGENDAHL, CHARLES H., and FOSTER, LE BARON R. *One Hundred Problems in Consumer Credit.* Pollak Pamphlet No. 35. Newton, Massachusetts: Pollak Foundation for Economic Research, 1938. Pp. 56. $0.10.

PUBLICATIONS IN PAMPHLET FORM

Abstracts and Reports of Summer Conferences on the Curriculum, July 5–28, 1938. Kalamazoo, Michigan: Western State Teachers College. Pp. 56.

ADE, LESTER K. *New and Improved Services, Department of Public Instruction, 1935–38.* A Summary of New, Re-established, and Reorganized Services from June, 1935, to August, 1938. Bulletin No. 12. Harrisburg, Pennsylvania: State Department of Public Instruction, 1938. Pp. 34.

BROUGHTON, PHILIP S. *Behind the Syphilis Campaign.* Public Affairs Pamphlets, No. 24. New York: Public Affairs Committee, Inc., 1938. Pp. 32. $0.10.

Evaluative Criteria: Basic Information. Washington: Cooperative Study of Secondary School Standards, 1938 edition. $0.60.

Good Reading. A Guide for College Students and Adult Readers, Briefly Describing about a Thousand Books Which Are Well Worth Knowing, Enjoyable To Read, and Largely Available in Inexpensive Editions. Prepared by the Committee on College Reading, Atwood H. Townsend, Chairman, for the National Council of Teachers of English. Chicago: National Council of Teachers of English, 1938 (revised). Pp. 96. $0.20.

Guidance Manual for Vermont Secondary Schools. Montpelier, Vermont: State Board of Education, 1938. Pp. 114.

How To Evaluate a Secondary School. A Manual To Accompany the "Evaluative Criteria" and "Educational Temperatures" of the Cooperative Study. Washington: Cooperative Study of Secondary School Standards, 1938. Pp. xii+116+22. $0.90.

Industrial Price Policies. Public Affairs Pamphlets, No. 23. New York: Public Affairs Committee, Inc., 1938. Pp. 32. $0.10.

Nineteenth Annual Report of the Director of the Institute of International Education. New York: Institute of International Education (2 West Forty-fifth Street), 1938. Pp. 92.

"Outline of College Community Organization: Administrative and Student Activities of the State Teachers College at West Chester, Pennsylvania, for the College Year 1938–39." West Chester, Pennsylvania: State Teachers College, 1938. Pp. 46 (mimeographed).

PENNSYLVANIA HISTORICAL COMMISSION. *Constitution Bibliography: Selected Reading List on the Constitution of the United States for Elementary and Secondary Schools.* Harrisburg, Pennsylvania: State Department of Public Instruction, 1938. Pp. 14.

RUBY, EDITH B. *The Children We Teach.* New York: Methodist Book Concern, 1938. Pp. 86. $0.25.

SEAY, MAURICE F. *Unprofessional Activities of Teachers in Appointments and in School Board Elections;* and MEECE, LEONARD E. *Functions of the Bureau of School Service of the University of Kentucky.* Bulletin of the Bureau of School Service, Vol. XI, No. 1. Lexington, Kentucky: College of Education, University of Kentucky, 1938. Pp. 38. $0.50.

A Study of Phonics and Speech Correction for the Wood County Schools, Wood County, Ohio. Prepared by the Primary and Intermediate Teachers. Bowling Green, Ohio: Charles S. Harkness (County Superintendent of Schools), 1938. Pp. iv+96 (mimeographed).

WEBER, O. F. *The Problem of School Organization and Finance in Illinois.* University of Illinois Bulletin, Vol. XXXVI, No. 15. Urbana, Illinois: College of Education, University of Illinois, 1938. Pp. 174.

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Educational News and Editorial Comment

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Age Composition of the Nation's Labor Force from 1890 to 1930

THE following statement is quoted from a release of the United States Bureau of the Census. Our readers will find it interesting because of its implications for education.

Director William L. Austin, of the Bureau of the Census, Department of Commerce, announced today statistics showing the age distribution of the nation's labor force at each federal census from 1890 to 1930. There were striking changes during the forty-year period ending in 1930 in the proportions of the population in various age groups who were engaged in gainful occupations. These changes were most marked in the youngest and in the oldest age classes. The proportion of children ten to fifteen years old who were gainfully occupied remained practically the same from 1890 to 1900, and then decreased rapidly during the next thirty years, being 18.2 per cent in 1900, 11.3 per cent in 1920, and only 4.7 per cent in 1930.

The proportion of gainful workers among persons sixty-five years old and over decreased continuously from 41.7 per cent in 1890 to 33.2 per cent in 1930. The percentage of men sixty-five years old and over who were gainfully occupied decreased from 73.8 in 1890 to 58.3 in 1930, while the proportion of women in this age group remained with little change at about 8 per cent.

The proportions of gainful workers among males sixteen to forty-four and forty-five to sixty-four, respectively, show little variation during the four decades, though these were decades during which there were marked industrial

TABLE 1

NUMBER AND PROPORTION OF PERSONS GAINFULLY OCCUPIED BY AGE, FOR THE UNITED STATES: 1890–1930

Census Year and Age	Persons Ten Years Old and Over		
	Total Number	Gainfully Occupied	
		Number	Per Cent
1930	98,723,047	48,829,920	49.5
10 to 15 years	14,300,576	667,118	4.7
16 to 44 years	56,279,663	33,491,651	59.5
45 years and over	28,048,786	14,626,720	52.1
45 to 64 years	21,414,981	12,421,753	58.0
65 years and over	6,633,805	2,204,967	33.2
Unknown	94,022	44,431	47.3
1920	82,739,315	42,433,535	51.3
10 to 15 years	12,502,582	1,416,684	11.3
16 to 44 years	48,124,654	29,338,834	61.0
45 years and over	21,963,380	11,604,558	52.8
45 to 64 years	17,030,165	9,913,601	58.2
65 years and over	4,933,215	1,690,957	34.3
Unknown	148,699	73,459	49.4
1910	71,580,270	37,370,794	52.2
10 to 15 years	10,828,365	1,621,726	15.0
16 to 44 years	43,209,237	26,620,049	61.6
45 years and over	17,373,613	9,046,237	52.1
45 to 64 years	13,424,089	7,606,392	56.7
65 years and over	3,949,524	1,439,845	36.5
Unknown	169,055	82,782	49.0
1900	57,949,824	29,073,233	50.2
10 to 15 years	9,613,252	1,750,178	18.2
16 to 44 years	34,655,514	20,222,999	58.4
45 years and over	13,480,474	7,006,413	52.0
45 to 64 years	10,399,976	5,803,970	55.8
65 years and over	3,080,498	1,202,443	39.0
Unknown	200,584	93,643	46.7
1890	47,413,559	23,318,183	49.2
10 to 15 years	8,322,373	1,503,771	18.1
16 to 44 years	28,323,461	16,161,989	57.1
45 years and over	10,605,560	5,555,877	52.4
45 to 64 years	8,188,272	4,546,824	55.5
65 years and over	2,417,288	1,009,053	41.7
Unknown	162,165	96,546	59.5

changes. On the other hand, there were decided increases throughout the period in the percentage of gainful workers among females in both of these age groups.

The data for population and gainful workers classified by age are presented in Table 1. . . . .

The age distribution of gainful workers may be considered directly on the basis of the total number of workers, as well as in comparison with the total population in the several age groups. The percentage distribution of gainful workers by age is shown in Table 2. . . . .

TABLE 2

PERCENTAGE DISTRIBUTION OF GAINFUL WORKERS, BY AGE FOR THE UNITED STATES: 1890–1930

Age	Total				
	1930	1920	1910	1900	1890
Total	100.0	100.0	100.0	100.0	100.0
10 to 15 years	1.4	3.3	4.3	6.0	6.4
16 to 44 years	68.6	69.1	71.2	69.6	69.3
45 years and over	30.0	27.3	24.2	24.1	23.8
45 to 64 years	25.4	23.4	20.4	20.0	19.5
65 years and over	4.5	4.0	3.9	4.1	4.3
Unknown	0.1	0.2	0.2	0.3	0.4

The percentage of all gainful workers represented by children ten to fifteen years of age decreased from 6.4 in 1890 to 6.0 in 1900, 4.3 in 1910, 3.3 in 1920, and finally to 1.4 in 1930. It is quite evident that children were only a small factor in the nation's labor force in 1930, and present trends indicate still further decrease.

The relative numerical importance of male workers sixteen to forty-four years old shows little net change between 1890 and 1930, representing 68.2 per cent of all male workers in 1890, and 66.0 per cent in 1930. The relative importance of male workers forty-five to sixty-four years old, however, increased gradually from 21.0 per cent of all male workers in 1890 to 27.6 per cent in 1930.

Females sixteen to forty-four formed 77.7 per cent of all female workers in 1930, as compared with 74.6 in 1890; female workers forty-five to sixty-four years old formed 17.8 per cent of all female workers in 1930 as compared with 12.3 per cent in 1890.

The proportion of all females ten years old and over engaged in gainful occupations has been increasing rather rapidly (from 13.3 per cent in 1870 to 22.0 per cent in 1930), and the additions have been largely in the lower age groups. Because of this, and because of the fact that large numbers of young women drop out of gainful occupation at marriage, much larger proportions of the female than of the male workers are in the lower age groups.

During the forty years from 1890 to 1930 the percentage of all gainful workers sixty-five years old and over varied somewhat irregularly between 3.9 and 4.5. With the further application of the old-age security plan, there will doubtless be for some years a decline in the proportion of old people in gainful employment. If the present low birth-rate continues, however, or if the birth-rate further declines, it is quite evident that the population will gradually grow older and that increasing proportions of the total population (in the absence of opposing factors) will be in the higher age groups.

Median ages, based on age classifications more detailed than those in Table 1, show that the nation's labor force has been growing gradually older and that at each census from 1890 to 1930 the median age of male workers was seven or eight years higher than that of female workers. The median age of gainful workers ten years old and over was, for males, 32.9 in 1890, 33.4 in 1900, 34.1 in 1910, 35.7 in 1920, and 37.4 in 1930; and, for females, 24.2 in 1890, 25.2 in 1900, 26.8 in 1910, 28.4 in 1920, and 30.1 in 1930.

The data presented herewith are part of a series of comparable occupation statistics now being prepared by the Bureau of the Census. This series, which is to be published in a forthcoming report, extends over a considerable period of years and includes statistics showing the industrial and the occupational distribution of the nation's labor force, as well as its age composition.

A New Educational Program for the State of New York

Late in 1935 the Board of Regents of the University of the State of New York initiated an inquiry into the character and the cost of education in that state. The inquiry was amply subsidized, and it was conducted by a competent technical staff including many nationally known educators. The findings and the recommendations of the inquiry will be presented in a number of volumes, the first of which has recently appeared under the title *Education for American Life*. This volume summarizes the central conclusions and the specific recommendations growing from the entire study. Part I presents the summary findings and recommendations. Part II contains a somewhat more extended discussion of three major elements of administration and finance: "A Home Rule Method for Improving School District Organization," "Rebuilding the State Education Department," and "Costs and Economies under the New Program."

The inquiry found that the schools of the state of New York are not adequately performing the task which has been assigned them.

The conclusion is reached that the shortcomings of the educational system are due to the following underlying causes:

1. The educational system has not yet adjusted its program to carry the new load imposed by the coming into the schools, particularly into the secondary schools, of all the children of all the people, with their many new and different needs.

2. The school work for boys and girls has not been redesigned to fit them for the new and changing work opportunities which they must face in modern economic life.

3. The school program does not sufficiently recognize the increased difficulties of becoming and of being a good citizen.

4. The educational system has not caught up with the flood of new scientific knowledge about the natural and the social world which has been made part of life in recent decades, and fails to give boys and girls a scientific point of view and an understanding of the world.

5. The educational system has not been replanned to meet the new conditions of modern life and the new ways of living, in which the family, the church, and early work now exercise less influence, and in which increasing leisure in later life calls for, and makes possible, a rich and growing inner life.

6. The citizens and the school leaders of the state of New York do not have a specific, agreed-upon goal. Both groups are going ahead in many directions, but without a destination toward which all may bend their energies.

The new program recommended for the state of New York presents a series of practical measures for action. The report states "in specific terms exactly what are the first steps to be taken" in realizing the objectives defined. The recommendations relate to the following aspects of the educational system of the state: "Secondary Education," "The Elementary School," "School District Organization," "Economies in School Costs," "State Aid," "The Teacher," "Colleges and Universities," "Adult Education," and "The State Education Department." The recommendations regarding the elementary school are quoted in the following paragraphs.

The educational needs of children up to the beginning of adolescence require a more definite and appropriate elementary-school program. This is to be achieved in such ways as the following:

Begin the elementary school with children of about the age of five, except where the difficulty of transporting young children makes this impossible. Preprimary, or kindergarten work as it is popularly called, should be a part of the regular school program and should be entitled to state aid on the same basis as the rest of the elementary program.

End the elementary school throughout the state with the sixth grade or at about the pupil's twelfth birthday.

Every elementary school should be part of a system maintaining a complete secondary-school program, and promotion within the elementary school and from the elementary to the secondary school should be determined locally in terms of the good of the child and in general accord with standards to be approved by the state but without the use of uniform Regents' examinations.

Make every elementary school large enough, but not too large (desirable limits are 180 to 600 pupils), so that classes may be of economical size, the educational facilities may be more adequate, some specialized teaching may be introduced, and the pupils may engage in group activities.

Make character development a central aim of the school program by providing inspiring teachers, introducing meaningful experiences into the curriculum, bringing parents actively into school affairs, introducing the pupil to outstanding ethical literature and standards, and co-ordinating the school program and that of the other community agencies concerned with the child.

Emphasize the importance of the basic mental tools—reading, writing, speech, and arithmetic—and expect every normal pupil to have a mastery of them by the end of the sixth grade. See to it that these skills are learned through their use in carefully selected experiences in which the learner can see how they function in daily life. See to it that the contents of the course of study are better geared to the psychological development of the child, especially in the fields of arithmetic, language, and the social studies. Greatly enrich the work in literature and reading.

Revise the elementary-school curriculum. Try to reduce the number of isolated, piecemeal elements of the curriculum, discontinue the present practice of adding new bodies of content by specific legal enactment, and repeal such existing legal requirements. Integrate the curriculum more fully by bringing out the relationships among the major fields of human experience which should form the basis of its structure.

Organize instruction so as to provide more adequately for differences in the abilities of children. Provide more fully for the education of the gifted and talented children of the community. Take steps to reduce the high percentage of nonpromotion found in many of the schools of the state. Study more fully the factors both in and out of school that may be conditioning the educational product unfavorably. Establish local or regional educational guidance clinics to provide the expert assistance needed to make such a program a success.

Strengthen the educational provisions for mentally and physically handicapped children, and, subject to state regulations, require adjoining districts to co-operate in the maintenance of such services.

Take steps to make available for teachers more adequate and up-to-date instructional supplies, materials, and equipment. Make more extensive use of modern means of instruction, such as the radio, motion pictures, and other visual aids. Make certain that all schools have good library facilities and that

the curriculum makes use of them. Introduce the wider use of field trips, excursions, visits to museums and to art galleries, and other trips, with the aid of school busses. Amend the law to require the provision of free textbooks and essential supplies to all children in public schools.

Organize a planned co-operative state and local program of research and experimentation dealing with all aspects of the educational process, including organization, curriculum, teaching procedures, appraisal, materials of instruction, and personnel.

This general report will be followed by more detailed studies of special phases of the educational system of New York. The announced list of special studies is as follows: *High School and Life, Preparation of School Personnel, State Aid and School Costs, Adult Education, Motion Pictures and Radio, When Youth Leave School, Education for Citizenship, Education for Work, The School Health Program,* and *School and Community.*

An Extensive Study of the Vocabulary of Elementary-School Children

Henry D. Rinsland, professor of education at the University of Oklahoma, and James H. Moore have recently prepared a mimeographed bulletin entitled "The Vocabulary of Elementary School Children of the United States." The bulletin describes the most ambitious attempt that has yet been made to discover the words most frequently used by children at each grade level. The investigation has been carried forward as a project of the Works Progress Administration. Extensive samplings of children's work were secured from rural and urban schools of every state. The materials were drawn from 411 cities, 53 colleges, and 235 counties. In order that a true cross-section of children's thought might be obtained, all kinds of materials were sampled, including, in round numbers, 16,000 personal letters, 21,500 expositions, 6,600 original stories, 1,000 poems, 6,500 examination papers, 4,600 conversation papers, 5,400 projects, and 29,700 other forms of expression. This project is similar to one completed by the same investigators in 1937. Evidence from the two projects leads to the following conclusions:

(1) Educators have pointed out the necessity of counting children's writings to determine the words that children can understand. (2) The sampling in the two W.P.A. projects herein reviewed is valid because of the large number of

kinds of writings and reliable because of the large number of running words counted. (3) The samplings of previous studies of children's writings are inadequate from the standpoint both of validity and reliability. (4) The writings sampled in this study are representative of the United States as a whole and justify the title of the project. (5) The disagreement between children's writings in Grades VII–VIII and those of adults, as shown by the Thorndike and Horn lists, is so great as to justify the extensive investigation financed by the W.P.A. (6) This study from the combined projects will yield a basal essential vocabulary for the writing of material for children from Grade I to VIII.

No claim is made that the present project presents the total vocabulary in writing books for children, but, as just mentioned, it does furnish the essential words which writers in all fields—geography, history, mathematics, science, art, and literature—may use in embodying technical words in these areas.

The directors of the study plan to publish the results of their investigation at some future date.

Here and There among the Schools

Activities selected for comment in this issue of the *Elementary School Journal* are, we believe, of more than usual interest. They relate to such matters as an administrative practice for caring for older pupils who are not ready for high school, a plan for community co-operative action, a summer-activity program, innovations in the improvement of reading, an inventory of elementary-school practice, and a plan for achieving integration in a departmentalized elementary school.

Making provision for older pupils not ready for regular high-school work

St. Louis has introduced what appears to be a novel practice in providing an educational program for pupils who finish the elementary schools but who do not demonstrate readiness to undertake the work of the regular high schools. George R. Johnson, director of tests and measurements, has supplied us with the following description of the plan.

One of the latest administrative devices in St. Louis for dealing with older pupils who are not ready for high-school work is the plan whereby two types of graduation from Grade VIII are provided. The certificates awarded to pupils on List I admit them to high school without examination. The certificates awarded to those on List II admit them only by examination, in which fewer than 5 per cent of the candidates are successful. The examination consists of standard

eighth-grade achievement tests and usually confirms the judgment of the principal and the teachers with reference to the inability of the applicant to proceed with high-school work. The eighth-grade graduates who are not admitted to high school enter one of the schools organized essentially as prevocational schools. The technical name, however, is "High School Preparatory." Usually pupils who spend a year or two in this school go to a vocational school rather than to a high school. The assistant superintendent who has charge of the vocational schools also administers the three prevocational schools. About two hundred eighth-grade graduates out of two thousand each semester enrol in these high-school preparatory classes.

The Dowagiac plan of community co-operation The community has always been an important institution in American life. In a democratic society it is essential that the people of each community be sensitive to the need of co-operative action in the solution of community problems. In recent years the community has been playing a less conspicuous role in the national life than it should play. There are several reasons for this loss. In the first place, improved means of communication and transportation—good roads, automobiles, telephones—have operated to efface old community boundaries and to establish new ones. This new configuration of community life has taken place so rapidly that it has been disturbing, for time is required to define new boundaries, to integrate the new community, and to discover new sources and elements of leadership. In the second place, the mushroom-like growth of many urban communities has had the effect of rendering community action less vigorous and effective. Finally, the legitimate transfer of functions from local governments to the states and to the national government has operated to reduce the importance of the community as a social instrument. The net result is that in most communities the tendency is to rely too much on outside assistance—on the county, the state, or the federal government. There is need for a revitalized community life, for the marshaling of all the resources of the locality in a co-operative attack on common problems. By its very nature, the school occupies a strategic position of leadership in any program of community co-ordination and co-operation, but only in rare instances has educational leadership fully exploited its opportunities.

The community plan which is being put into operation in Dowagiac, Michigan, is illustrative of the kind of action suggested in the preceding paragraph. The following description of the plan was sent to us by Carl M. Horn, superintendent of schools. It was prepared by Carl M. Horn and by Leeds Gulick, director of the Dowagiac Community Plan.

Realizing the tremendous possibilities of a co-operative program, Dowagiac has undertaken a unique plan. This city of 5,550 serves a rural area of approximately 150 square miles. The Dowagiac Community Plan provides for the formation of a council with one representative from every organization in the community. The preamble of the constitution denotes the purposes and gives direction to the program. The preamble reads as follows:

"Believing that life, liberty, and the pursuit of happiness are the right of every member of our society, and that these in fullest measure can be attained only through united action, we, the representatives of fifty-five organizations, hereby establish the Dowagiac Community Plan for the improvement of the social, cultural, spiritual, and economic phases of our community life."

A full-time director was chosen in September of this year and a definite shaping of the program was begun with the adoption of a constitution and the forming of the Community Council. Its members represent the people and their own organizations and carry to the people the information and enthusiasm for the Community Plan. They elect an executive board of eighteen members to plan the activities, receive and pay out funds, and appoint the director. An executive committee of the three officers of the Community Council handles minor problems as they arise. The director requests subcommittees to advise him on all important phases of the work, such as a community school committee, public forum committee, a placement service committee. Thus, all the Community Council members likewise serve on these more active committees. Others, not on the council, are also called to serve with them, the maximum amount of individual as well as organizational co-operation being thereby obtained within the community.

Even before contact could be made with the large number of organizations and their representatives reached individually in order that the meeting for approval of the constitution could be arranged, plans were laid for a few leading activities to be sponsored by the Community Council. These plans were made so that no time would be wasted before people could see concrete results of the plan before their eyes, and not as a nebulous dream. Our policy being to sponsor first those things which have been tried successfully in Dowagiac in other years, we began with three activities: a short-term community school for persons whose formal education had ended and who were sixteen years of age or over; a public forum, with four well-qualified leaders, on nine evenings throughout the autumn and winter; and a placement service for persons seeking and those offering work in the community.

Because of the splendid work of those who prepared the way for the Com-

munity Plan and the place of confidence which they hold in the whole region, interest and readiness to co-operate in the activities are high among the citizens of little education as well as those more privileged, those in the rural districts as well as those within the city. The problems now confronting the council are providing proper understanding of the real program by the people as a whole, patience in seeing the plan unfold without undue haste, and securing full participation by all levels of people rather than certain sections.

A feature of the whole setup of the Dowagiac Community Plan is the important place that is given to youth. Of the sixty representatives on the Community Council, four are leading young persons. The executive board, with more actual authority, has a membership of eighteen persons, one of whom is a youth and another an adviser of youth. . . . .

Proposals for activities to be sponsored by the Community Council have been many. These proposals have been divided into the following twelve categories: athletic, civic, co-ordinative, economic, educational, health, home and family, recreational, spiritual, survey, welfare, and youth. Activities listed under these categories are classified according to the probability that they can be taken up within a short time, within a year, or within a period of over a year—perhaps not for five years. With our policy of making haste slowly and building on solid foundations for a lasting program, we expect, within the first five-year period, to put into action only a fraction of the proposals.

Concretely, what are the more important activities proposed? They may be listed as follows: rural-urban co-operation for mutual improvement; united action by local business and resort-owners for economic betterment; development of small co-operatives for buyers and sellers; more community affairs, such as festivals, fairs, and community singing; an industrial relations board to iron out differences between capital and labor and to create co-operative effort; community education as a permanent part of community life; public health, sanitation, medical insurance for all; a recreation program to include everyone who wishes to participate; a community center to house all community interests for young and old; a united city- and country-wide program to make the community church-minded; adequate surveys, revised frequently, to provide bases for better service to the community; an intelligently directed and adequately provided welfare service; a program for youth that will fit the needs of rural and urban boys and girls and young men and women.

The natural question that follows this ambitious program is that of its financial support. The reader will note that the Dowagiac Community Plan has but one paid executive; the George-Deen Act of Congress provides for the major portion of this cost and a local donor the remainder. Otherwise, there is almost no expense, and none will be incurred until funds are voluntarily offered for such activities as need financial outlay.

The leadership for the youth program has been largely voluntary, and there is no reason why this larger undertaking should lack for volunteer leadership in abundance. There are two reasons for beginning with as small an expense as possible. The first is the desire to get the people and the business concerns in

Dowagiac to co-operate on those things which are of definite public service and yet will not be a financial burden from the beginning; as they see value in the program and demand more activities for which they are willing to pay, these will be provided. Second, if there is anything of value to other communities, this program will be a demonstration of what can be done with a minimum of expense provided there is sufficient co-operation on the part of the public.

We have found that the only requisites for our Dowagiac Community Plan are a united backing from the school authorities and local organizations, co-operation of the state educational offices, and a willingness on the part of the citizens to work intelligently and willingly for the good of the entire community.

The Winfield, Kansas summer-activity program

The problem of caring for urban children in the summer has grown increasingly perplexing. There is little work for them to do in the home or in the community, and opportunity for wholesome play and recreation diminishes as population grows more dense. Some parents are able to send their children to the country, but most parents have to make the best of a situation that is trying on their own nerves and on the nerves of their children as well. Many communities are now operating summer-playground programs which are of distinct advantage, and in some places the school authorities are beginning to assume a larger responsibility for the welfare of children during the summer months.

Evan E. Evans, superintendent of schools, of Winfield, Kansas, has put into operation one of the most extensive programs of summer activities that have come to our attention. The program is described at some length in a bulletin entitled "The Winfield Summer-Activity Program." The following paragraph quoted from the bulletin indicates the general scope of the work that is being undertaken.

The Winfield summer-activity program combined *all of the wholesome activities* in which the boys and girls of Winfield indicated an interest. All enrolment was purely voluntary, and groups met once, twice, or three times a week. A four-period program was set up so youngsters who wished might participate in activities which would take all of their time from 8:00 until 12:00 in the morning five days a week—Monday through Friday. These periods were so divided that most activities were in multiples of two hours. The A period was from 8:00 to 10:00 on Mondays and Wednesdays, and the C period from 8:00 to 10:00 on Tuesdays, Thursdays, and Fridays. This long period gave a better opportunity for a full game of softball, for more concentrated activity in the various crafts lines, and for more continuous and more effective practice in dramatics and music. The B and D periods were from 10:00 to 12:00 on the same days as the A and C periods. On this basis the following activities were organized: four

groups of manual training; four in crafts; three in sewing; one in foods; four in art; four in creative writing and creative dramatics; one in dramatics; two in journalism; two in chorus; two in stringed instruments and two string ensembles; two story-telling clubs; one reading club; six playground groups; four groups took class lessons in tennis for girls and three groups took class lessons in tennis for boys; two softball leagues; seven hundred students were enrolled in twelve classes in swimming; one group took brass instruments, one woodwind, one horn, one conducting, one flute, and one drums. An additional swimming group was offered for the negro children of the community. All in all more than twelve hundred children on the elementary and junior high school level were enrolled in these activities. The activities began the week following the close of school and continued for eight consecutive weeks, closing Friday, July 22.

A staff of thirty-seven persons was employed to carry out the program. Fourteen worked full time for five mornings a week, and the others worked less regularly. In every instance a specialist had charge of the activity being carried on, and all the members of the staff were particularly well qualified for the work that they were doing. No marks were given for the work done, the only recognition being awards for success in the various activities. All the cost of instruction and administration was paid by the Board of Education.

A city-wide program for improvement of reading

The area of reading is one in which scientific investigation in this country has been carried far. Reading specialists know a great deal about their subject and have embodied their knowledge in scores of books and monographs and hundreds of articles. There has been a striking lag, however, between knowledge and practice. It is, of course, no easy task to translate knowledge into practice where hundreds of thousands of teachers in all kinds of teaching situations are involved. At present the improvement of reading in the schools of the nation depends in large measure on wise and vigorous administrative leadership. City-school superintendents cannot avoid the responsibility of devising and implementing programs of reading instruction which carry into the classrooms the best known practices with respect to the teaching of reading. It is extremely gratifying to note that school superintendents and principals are attempting to meet this challenge to their leadership.

The innovations being introduced into the reading program of the schools of Allentown, Pennsylvania, under the leadership of Superintendent William L. Connor, are a case in point. Space will not per-

mit detailed account of the technique pursued in the elementary schools of Allentown in handling problem cases in reading, but Superintendent Connor reports as follows on the results being achieved:

After nearly two years' practical use of this technique, with no more scientific equipment than one of the Betts telebinocular testing devices, with the accompanying cards and record sheets, and occasional aid from a local optometrist owning an ophthalmograph, an ophthalmoscope, and a metronoscope, the non-promotion rate in reading has been reduced from 7 or 8 per cent to practically 0.

At the same time, in the case of the group of lowest mental ability, achievement in reading as measured on standard tests has been brought, in twenty-three or twenty-four elementary schools, closer to the norm than the intelligence-test results would indicate that they could be.

In the case of the schools and classes of higher mental ability, the curve of achievement in reading now follows the curve of the mental-test results.

Some dozens of children are still under remedial instruction for sensory and oculomotor defects. Many have been restored to normal reading capacity, and others are being discovered almost daily and given remedial work.

However, in the lower grades the largest gains have come from training perfectly normal children by experience charts; in the upper grades, from training in the reading abilities of the higher orders.

The whole experiment is a testimony to the fine possibilities of a successful approach to the reading problem mainly by intelligent use of rule-of-thumb observations and remedial devices for lower-order difficulties and, for higher-order difficulties, a determined attack on the social-psychological and psychological-technical difficulties of children in learning to read.

Inventory of elementary-school policy and practice

Nelson L. Burbank, assistant principal of the Sands School, Cincinnati, Ohio, has prepared a hundred-page booklet which bears the title "A Handbook of Information for the Elementary School." The handbook contains a vast amount of information with respect to the operation of the school; no phase of policy or practice is omitted. It is designed for administrators, teachers, and pupils and should serve to give them a complete picture of what the school is attempting to do.

Combining advantages of departmentalization and integration in a city school

From Charles M. Rogers, superintendent of schools of Amarillo, Texas, we have received the following description of a plan which attempts to break down the traditional practice of teaching subject matter in isolation but which also seeks to preserve many of the values of specialization.

In 1937 the Amarillo public schools revised the course of study for the elementary grades. In Grades I, II, and III all the work is integrated and taught by the room teachers, but in Grades IV–VII, inclusive, teachers have been selected according to their major and minor subjects in college. Although each teacher is expected to have a broad knowledge of subject matter, each has learned, both in college and from experience, a method and technique for developing habits, skills, and appreciations in a particular field, especially social studies and language arts. In order that the schools may utilize some of the specialized training of the teachers in their particular fields and, at the same time, carry on an integrated program of work, the teachers of language arts and social studies use the same units of work, these units being based on the social-relations core; for each of these fields has a place in the development of human values, in an understanding of the processes of cultural change, in the interdependence of cultural aspects, and in the development of the art of communication.

In order that integration be achieved, it was necessary for the teachers of the special fields to work together in planning their activities, procedures, and content materials. In this way the language-arts teachers use the subject matter gained in the social-studies classes to develop habits, skills, and appreciations in language arts. In like manner the teachers of art, music, and elementary science base their work, as far as possible, on the units that are being developed in the social-studies and language-arts classes. However, in these fields and also in arithmetic and in health and physical education, special units are set up to develop technical skills that could not be brought naturally into a social-studies and language-arts unit.

This plan has now been in operation for a year and a half. We feel that it has been successful, for there is a breaking-down of the traditional practice of teaching subject matter in isolation and there is close harmony and mutual helpfulness among teachers and pupils in the several core areas. The teachers and the pupils are more able to see their work in relation to the larger whole—the unified school problem of guiding boys and girls to fuller realization of the possibilities of living rich and useful lives.

Who's Who for January

The authors of articles in the current issue Mary G. Kelty, author of textbooks and professional books in education. Foster E. Grossnickle, professor of mathematics at State Teachers College, Jersey City, New Jersey. Avis E. Edgerton, assistant professor of health education at Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma. Billie Hollingshead, assistant professor of education at Brigham Young University, Provo, Utah. Karl F. Nolte, supervisor of

intermediate and upper grades in the public schools of Hibbing, Minnesota. WILLIAM C. REAVIS, professor of education at the University of Chicago. NELSON B. HENRY, associate professor of education at the University of Chicago.

The writers of reviews in the current issue RICHARD W. BARDWELL, superintendent of schools at Madison, Wisconsin. G. ROBERT KOOPMAN, assistant superintendent of public instruction of the state of Michigan. G. T. BUSWELL, professor of educational psychology at the University of Chicago. L. C. GILBERT, associate professor of education at the University of California. FRANCIS F. POWERS, associate professor of education at the University of Washington. HOWARD R. ANDERSON, assistant professor of education at Cornell University and chairman of the Junior and Senior High School Social Studies Department in the public schools of Ithaca, New York. GERTRUDE WHIPPLE, associate professor of education and supervisor of reading at Wayne University, Detroit, Michigan. WILLIAM J. BERRY, professor in the Department of Geography and Geology at Western State Teachers College, Kalamazoo, Michigan. HELEN E. RICHARDSON, teacher of social studies and English in the University Elementary School of the University of Chicago.

READING THE MATERIALS OF THE SOCIAL STUDIES IN THE MIDDLE GRADES

MARY G. KELTY
Chicago, Illinois

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RECENTLY the voice of the university professor has been added to the voices of the high-school teacher, the upper-grade teacher, and the teacher in the middle grades, all chanting in unison, "What are we to do about students' inability to read social-science materials?" The words "natural science" or "any kind of content field" might equally well be substituted for "social science."

Happily, the fault-finding stage has already been passed. No longer is each person seeking to lay the blame on the teacher just below him. Neither is any of them satisfied with merely an analysis of the factors which together have brought about the present unsatisfactory condition, such as the social and the economic forces which have driven children out of gainful employment and hence into remaining at school, the new promotion practices, the compulsory education laws now applying to upper-age limits, the enrichment of the curriculum demanding a different degree of mastery than formerly, and individualization of instruction intensifying the differences between pupils. The concern of all is rather with the practical problem of how to meet the situation thus created.

On closer examination, the successful reading of factual materials proves to be not one problem but at least three problems: (1) What program can be evolved which might prevent the present deplorable condition from arising? (2) What can teachers do with the large groups of children now in their classes who cannot read effectively but who might respond to the kind of remedial treatment which the ordinary classroom teacher can learn to administer? (3) What provision can the school make for the numerically smaller groups of pupils who, because of intelligence or personality handicaps, are totally uninterested in the usual curriculum and get little or no value from it? What part should reading play in their program?

The attitude of most teachers in the past has been, and in the present probably continues to be, one of awe before the clinical diagnostician, with his formidable array of technical equipment. Consequently they have been inclined to leave reading problems to such specialists. There has been much talk about "every teacher a reading teacher," but all too little has been done about carrying the theory over into practice.

The efforts of both clinical diagnosticians and classroom teachers are needed, but under present conditions the number of problem cases that can be solved by a well-prepared teacher who is willing to learn the remedial methods already worked out[1] is many times greater than the number that can be handled by the specialist. Most schools are completely without services of any clinical worker. Attention will, therefore, be focused in this discussion principally on the reading problems with which the classroom teacher can grapple even without the help of experts.

A frontal attack might be made by beginning to consider immediately the nature of the reading process. Since, however, studies in this field have shown conclusively that the process varies as the materials and the demands vary, a frontal attack is perhaps not the best strategy. Instead, it may be advisable to begin by constructing a long-range program which will tend to prevent reading difficulties from arising or which will at least minimize their prevalence and seriousness.

THE CURRICULUM AS A DECISIVE FACTOR

Values of direct experience.—The curriculum of most primary grades today consists largely of direct experiences. Such experiences are valuable in and of themselves, for they provide orientation in the wide world of the school and the community. They also emphasize, from the beginning, the formation of habits of active participation rather than of passive receptivity.

An added value, of probably equal importance, is that these direct experiences furnish a rich store of meanings and ideas which will

[1] Arthur I. Gates, "Diagnosis and Treatment of Extreme Cases of Reading Disability," *The Teaching of Reading: A Second Report*, pp. 391–416. Thirty-sixth Yearbook of the National Society for the Study of Education, Part I. Bloomington, Illinois: Public School Publishing Co., 1937.

later be combined and re-combined to form the basic concepts in terms of which abstract thinking can be carried on. For example, take the case of children who, perhaps at the end of the third grade or the beginning of the fourth, find themselves confronted by the word "war." Happily, in America, they have had no immediate experience of what war is. In what terms, then, are they to read meaning into this new word or to interpret it? The stock of direct experiences which can be utilized covers a wide range. Children have seen boys, animals, and perhaps men fight; they may have seen groups fighting in a labor disturbance; they have seen parades and uniforms; they may have heard guns fired; they may have seen the mangled bodies of animals that have been shot. They have cut themselves and have seen blood flow; they have a knowledge of pain and even of death. Out of all these elements they select those implied or described in a given story of war and form a new combination or concept. Visual aids help them to order or arrange the visual picture.

In recognition of such values, the primary curriculum has been—at least in theory—entirely reconstructed in terms of direct experience. No longer is it necessary to plead with primary teachers that such revision ought to be attempted, although surveys of practices reveal discouragingly slow progress toward realization of the ideal. Many teachers lack confidence to try the more difficult program. They find it easier to keep pupils in assigned seats most of the time, or they fear that the "tool subjects" will be neglected. Many administrators are unsympathetic because of the very real difficulties involved whenever education is emancipated from the four walls of a classroom.

One of the greatest needs of middle and upper grades is likewise to use a much larger measure of direct experience than is the practice at present. Children's stock of concepts developed in the primary grades is not large enough nor rich enough in meaning to enable them to interpret the developing range of interests. While vicarious experience will constitute a constantly increasing proportion of the curriculum, it can never dispense with nor entirely replace direct experience, even at the graduate level in the university.

If a curriculum involving much direct experience could be as-

sumed as existing throughout the elementary school, a chief stumbling block in the mastery of the reading process would automatically be removed.

Need of studies of grade placement.—There is need of many more evaluation studies of grade placement. While it seems to be true that almost any topic or problem can be considered from some angle at almost any level, it probably is true also that some are better fitted for the "average" children of a given age level than are others. Little guidance is available on this important problem; and, in consequence, schools try out one plan after another, usually without adequate evaluation of any of them. Judgments are arrived at on the basis of prejudice, desire for publicity as the originators of something new and different, or sheer restlessness and boredom.

Marked improvement has been effected in the past few years. Complicated and involved social problems, with regard to which even experts are confused, are less often encountered as curriculum materials for the middle grades. The junior high school, however, is still in a sad state of confusion. Educators are extremely unrealistic in their assumptions as to the intellectual maturity of children from twelve to fifteen years of age. While these children may be able to follow broad general outlines of social problems and their plain implications, the evidence at present available as to the extent of their analytical ability is such as to urge caution. Much more evidence, however, is needed before types of curriculum materials can be placed at a given level with any degree of confidence.

On one matter concerning grade placement, improvement in practice has been effected; it has influenced interest and, therefore, progress in reading. A survey of present practices shows increasing agreement that broad areas to which considerable time and attention are given at one level should not be repeated at the next level but that one level[1] should intervene before a return is made to consider the same area from a new angle. By that time the increased maturity of the children makes possible an entirely new approach.

For example, if the community is the direct subject of study throughout the primary level, it is used in the middle grades, not as

[1] By "levels" are meant primary grades, middle grades, junior high school, and senior high school.

the principal center of interest, but mainly as a means of pointing contrasts. Not until the junior high school or upper grades does it command another year of direct intensive study. By that age children have so broadened their mental and emotional horizons that they are able to secure entirely new values from the second viewing.

Similarly, if the national culture and its growth are to be the subject of extended study at the senior high school level, world-culture is selected as the center of interest in the junior high school and the national culture is brought in only in its broader setting. The simpler aspects of the American scene are now considered in the middle grades.[1] The senior high school is, therefore, able to return to this area with a deepened understanding and a broader background against which to project the problems.

On the other hand, there is to be found in some schools the completely opposite tendency to repeat certain functions or themes throughout every grade at every level, for example, conservation, recreation, and education. The assumption is that teachers will be able to limit consideration in every grade to certain aspects or phases of the function and that there will not be repetition of ideas and materials, with consequent loss of interest. The educational world will eagerly await evidence on this point after a full six-year experiment shall have been completed.

When, or if, the time comes that the problem of placing materials according to the interests and the capacities of children at different levels shall have been solved, another source of many present difficulties in reading will have been removed.

Analysis of levels of difficulty in terms of mental development.—However satisfactorily grade placement may be adjusted in terms of the "average" child in a given grade or age group, such placement of curriculum materials, in itself, will not meet the varying needs of children. The range of abilities within each grade or age group has been so emphasized in recent years that curriculum-

[1] The principal "conclusion" of the Commission on the Social Studies of the American Historical Association with regard to the study of the American scene was that these aspects belong in the middle grades. See: *Conclusions and Recommendations of the Commission*, pp. 59–60. Report of the Commission on the Social Studies of the American Historical Association. New York: Charles Scribner's Sons, 1934.

makers today recognize that they must take on an added responsibility.

Since the average grade contains children with a range of five grades in a given ability,[1] the curriculum materials must be capable of treatment at different levels. One solution is a completely individualized curriculum. Such a curriculum, however, leaves much to be desired in the social aspects of growth. The other solution is to choose a center of interest which all the children will accept eagerly but which is capable of being treated at the differing levels of ability and experience within each classroom.

In order to make this second solution of the problem workable, the teacher must have available some expert assistance. For she must know what constitutes the easiest level on which a given subject may be considered, the complications which may be introduced next to promote healthy growth, the aspects which may be undertaken later with some hope of success, etc. To furnish such developmental guides, studies have been begun in the content fields of geography, science, and history, as well as in spelling and arithmetic. These have been reported in various yearbooks and similar educational literature. The same types of guides are not available for most other curriculum plans in trial use at present. For this reason many educators are returning to the belief that units chosen from "subjects," organized with available guides of the degrees of difficulty involved, are meeting the needs of children better than materials on which less guidance with regard to growth can be given for the teacher.

This adjustment of curriculum materials to the range of abilities within a grade affects the reading success of children. Reading materials must be prepared by authors who have studied the growth levels for which they are writing, and teachers who are administering the use of the materials must recognize the growth-process involved. Specific study exercises involving more mature reading habits for the better readers should accompany the materials.

Vocabulary difficulty as a factor in success in reading.—If the cur-

[1] For example, what is called a "fifth grade" contains not only children of fifth-grade reading ability but also, on the one hand, some children of sixth- and seventh-grade reading ability and, on the other hand, some of fourth- and third-grade reading ability. The teacher, as best she can, must help each child to grow!

riculum has been built largely on a basis of direct experience, if adequate grade placement has been achieved, and if careful provision for differing mental development has been made at each level, a firm foundation will have been laid for dealing with vocabulary difficulties as they arise. Even then, specific study of the problem is still necessary.

That understanding of vocabulary is one of the best indexes of intelligence has long been recognized, and that grasp of the meanings attached to words is second only to general intelligence itself as a factor in success in school is also generally conceded. The problem therefore is one of basic importance. Vocabulary difficulties are known to be of two kinds: the first, necessary difficulties, to be accepted and systematically provided for; the second, unnecessary difficulties, to be avoided or eliminated.

The class of "necessary difficulties" is presented by the technical or the special basic vocabulary of each discipline, in terms of which the thinking processes relating to the subject are carried on, for example, such terms as "liberalism," "conservatism," and "democracy," or ordinary terms with new meanings, such as "constitution." Fortunately the individual teacher need not rely exclusively on her own judgment in deciding what these terms are. Much work has been done along this line, and lists are available which have been more or less scientifically devised. The teacher can break these lists up into small groups of two or three items and include, in her unit plans, specific provisions for developing the meanings of these selected concepts. She may have to provide direct experiences; she may utilize dramatizations; she may find that the context will suffice; or she may need to add a few words of explanation. No alert or well-prepared teacher would allow the children to repeat the dictionary definitions. If every teacher made specific provision for developing the meanings of concepts, the greatest single difficulty in reading social-science materials would be removed.

The second type of difficulty, referred to above as avoidable, consists in unnecessary complications caused by an author's style: attempts to use literary devices, such as figures of speech or inverted order; needlessly long and complicated sentence structure; use of long and hard words where simple words would do just as well;

etc. Books or other reading materials for children should be selected carefully with the aim of avoiding such needless complications. Some authors have made earnest attempts to adjust their style to these demands, and others are being forced into line. This criticism of authors' embroidering of their diction should not be interpreted as implying that they should write only terse and bald summaries. Nothing could be farther from the truth. Many studies have shown that such statements do little to arouse interest and therefore do not assist in a mastery of reading. On the contrary, materials for children should include a wealth of colorful detail; they should tell how the characters looked, what they ate, the kinds of houses in which they lived, etc. Consequently stories should be fairly long, rather than only a few paragraphs in length. Such details can be told in short easy sentences, simple in structure. They need not present difficulties which the subject matter does not call for.

An interesting discussion might be provoked concerning the usefulness of the various check lists often used as standards. Authors who have consciously attempted to control their diction would probably agree that the existence of such lists has made them more "word-conscious" than they might otherwise have been, regardless of how accurate the lists may be with respect to the ease or the difficulty of a specific term.

In the upper grades or the junior high school, no serious problem is encountered in adjusting reading material to the pupils' level. Lower-group pupils in the sixth grade can be supplied with books written at the fourth-grade level on the same topic, and seventh grades can be supplied with books written at the fifth-grade level, etc. In the third and the fourth grades, however, a different problem is presented. Books on the same topic written for first- and second-grade level are not available and, in the opinion of persons who have made earnest attempts to secure such needed adjustments, never can be. School administrators and teachers are likely to accuse textbook-writers of laziness or unwillingness to try to make such adjustments. The truth seems to be that a law of diminishing returns operates in this matter as it does in many others. Down to a certain point simplification is desirable and possible. Beyond that point, if attempt is made to simplify still further, words are no longer

able to carry the necessary meanings. Their entire significance is lost. Such a point of diminishing returns seems to be located somewhere near the usual vocabulary of the third and fourth grades.

Dealing with difficulties at those lower levels, then, should begin with the reorganization of the curriculum, as outlined above. Then, if oral presentation of a given topic or problem proves that it is not the *ideas* which are causing the difficulty, further advance lies in the examination of the whole reading program, as will be outlined below, and specifically in a modification of technique for slower readers.

Any school which makes a concerted attack on its curriculum, as briefly set forth up to this point, finds that it has a reading problem entirely different from the problem that it would have had if it had begun by attacking reading as a process by itself, unrelated to what is read.

PROBLEMS BELONGING SPECIFICALLY IN THE FIELD OF READING

The particular question which has long baffled teachers of the middle grades has been why children who achieved satisfactory scores on "comprehension" in standard reading tests seemed to have difficulty when they attempted to read factual materials in the content fields. There seemed to be little carry-over, and the natural reaction was for teachers to blame the materials used. Often their complaint was justified, as has been discussed above. The same question must now be approached from another angle—that of the reading process itself.

It seems strange to be forced to plead, before certain groups of extremists, for a curriculum and a technique which will secure, among other values, a mastery of reading. But the necessity exists. Some enthusiasts have become so engrossed with direct experience and the functionality of simple acts of everyday conduct that they have considered reading relatively unimportant. So it may be for children of the very lowest intelligence, but for all others it must remain one of the most valuable assets to be acquired in the entire educational experience. To produce nonreaders in groups which could have developed into readers is nothing short of a major tragedy.

Teachers who feel themselves tempted to go to such extremes

might perhaps gain perspective by considering from two standpoints the process of applying ideas gained through reading: (1) The child reads to find answers to problems which society has already solved but the solutions of which are new to him. (2) The child aids in the discovery of new relations among facts, even in regard to matters about which society has not yet arrived at a solution. The second will necessarily come later than the first.

Changing purpose of reading.—When an answer is sought to the question which opened this section of the discussion, the fact must be recognized that the American people are once more in the midst of a change in the *purpose* of reading. Historically the change can be traced from a religious to a moral to a literary purpose, but it may not be so easy, perhaps, to see that the general purpose today, as judged by present practice, is still only the achieving of literacy. The school is satisfied if the citizenry can read and write.

Such an achievement on the part of more than one hundred million persons is certainly justification for national pride—the first time this achievement has been accomplished in the history of the world. The school, however, cannot rest at this point. New conditions and new problems demand not only that people be able to read tabloid newspapers, the picture periodicals, and "true confession" magazines but that they be able to analyze issues and pass judgment on the basis of evidence presented.

"Comprehension" is assuming a much broader meaning than merely following the outlines of a pleasant story. Perhaps ideas would be clarified if the phrase were expanded to read "comprehension plus interpretation." This growing demand on the reader may furnish a clue to the increasing breakdown between apparent ability to read in "readers" and the ability to read in content fields. The two aspects have been attempting to achieve quite different purposes in regard to meaning and significance; yet both processes were called "reading."

The expert in the field of reading is now pointing out that modern life is making new demands and that teachers cannot expect children, unaided, to do the more exacting kind of reading demanded by the factual materials of modern curriculums. Teachers must assume as a part of their task the developing of ability to comprehend

the deeper and more meaningful materials usually found outside "reading textbooks." This duty should not be resented as an added burden but should be recognized as the means of equipping a new generation of pupils to reach a higher level of thinking and reasoning than was achieved by their forebears.

Workers in content fields have for some time been laboring to emphasize seeing of relationships, comparing, abstracting, generalizing, and developing concepts as the necessary follow-up of reading. Even they, however, did not think of such processes as constituting "reading"; they were more likely to call these exercises "study." They did insist, however, on the necessity of providing such experiences for children and hence differed in practice rather sharply from the usual "reading teacher."

Teachers of content subjects, therefore, have been greatly encouraged by recent conclusions coming from experts in the field of reading. For example, the Thirty-sixth Yearbook of the National Society for the Study of Education states definitely that the line between "reading" and "study" must be broken down and that, until children can arrive at deeper meanings, they cannot be considered to have read successfully.[1] Professor W. S. Gray's reading conference at the University of Chicago in June, 1938, emphasized this point repeatedly.

When the time comes that all elementary-school teachers throughout the country recognize their responsibility in this matter, the reading class and the social-studies class will no longer be working at cross-purposes. For a generation educators have been preaching "every teacher a reading teacher," but practice has belied the theory. On the contrary, teachers have often been resentful if the children have performed less well in content fields than in "reading books." Small indeed has been the number of teachers who have recognized that reading different kinds of materials is a process which must be *taught* anew from each new angle attempted and that reading of content subjects is a highly specialized but necessary task.

[1] William S. Gray, "The Nature and Types of Reading," *The Teaching of Reading: A Second Report*, pp. 25–28. Thirty-sixth Yearbook of the National Society for the Study of Education, Part I. Bloomington, Illinois: Public School Publishing Co., 1937.

As an example might be cited the case of the honors students, largely valedictorians and salutatorians from many high schools, who have constituted certain university classes in honors courses. Nobody would maintain for a moment that these students could not read in general, but they found themselves quite unable to read the new and unusual materials with which they were confronted. Even such students as these had to be given a period of training in the kind of reading needed in the new situation.

When all teachers are willing to train their pupils in *how to read* the needed types of materials (and when they know how to give this training), the wide gulf which now yawns between reading in readers and in content fields will be spanned.

Getting a better start and receiving better remedial treatment.—The statements given above must not be taken as implying that reading teachers have not already made a marked advance. The primary-grade level has definitely recognized its responsibility, and, in such studies as those of reading readiness and the gradation of difficulties, it is now succeeding much better in enabling children to start without the tremendous handicaps of a few years ago.

Other studies, such as Gates's experiments with different kinds of materials and teaching methods,[1] added to the studies of reading readiness, have placed the theory of primary-grade reading on a high level of efficiency. When practice in the field can be brought up to the level of what is already known, an enormous advance will have been made toward the elimination of most reading problems throughout the schools.

Less gratifying results have been achieved in the middle grades, perhaps because, over the country as a whole, this level has not yet begun to feel the improvement effected on the primary level in the best schools. Therefore it has to deal with a situation aggravated every year. By the upper-grade and junior high school levels, the situation has become serious in the extreme.

The very practice of extensive reading, valuable as it undoubtedly is, has in some cases become a stumbling block, for children have

[1] Arthur I. Gates, with the assistance of Guy L. Bond, "Failure in Reading and Social Maladjustment," *Journal of the National Education Association*, XXV (October, 1936), 205–6.

been encouraged to read too widely and in too haphazard and slipshod a manner, without balance by systematic and continuous exercises in interpretation. Interpretation requires time and thought; it cannot proceed with great speed.

Moreover, middle-grade teachers as a rule are not prepared to handle the wide range of ability found in all groups. This matter has already been referred to. Most fourth-grade teachers, for example, may know how to teach "fourth-grade reading," but comparatively few know how to deal with difficulties at a second-grade level. Yet many of their pupils are at the latter level!

Some schools are attempting to furnish a remedy by after-school conferences and demonstrations in which primary-grade teachers show middle-grade teachers how they handle typical difficulties. Much more of the same type of thing might be done with profit at the upper-grade, junior high school, and even senior high school levels. How many "special teachers" of social studies know anything about the teaching of reading? How much help are they able to give to pupils who are encountering difficulties in reading the materials in their own field?

To give some specific examples of what might be done, one might mention the conclusion from recent unpublished studies, carried on by William Young at the University of Iowa, that oral presentation before reading is of great assistance to slow-learning pupils. This principle might well determine practice whenever a new topic or block or unit is attacked by such groups; but wide observation of present-day procedures reveals comparatively few cases in which advantage is taken of this finding.

Other studies[1] have shown conclusively the value of testing reading[2] by answering guiding questions of considerable scope and comprehensiveness (which may be done by the pupil himself) instead of continuing to re-read or to read the same topic from several sources without any attempt to test one's mastery. Yet a surpris-

[1] *a*) Arthur I. Gates, *Psychology for Students of Education*, p. 336. New York: Macmillan Co., 1930 (revised).

b) S. L. Pressey, *Psychology and the New Education*, p. 408. New York: Harper & Bros., 1933.

[2] This statement does not apply to reading strictly for recreational purposes.

ingly large number of capable teachers feel that the use of any such system must be branded as unprogressive. They refuse to abide by the findings of the studies because these findings do not fit in with their theories.

Another even more striking example of lagging practice is the small proportion of classes above the primary level in which any division of the group takes place during the reading of social-studies materials. Middle- and upper-grade teachers are still teaching classes as a whole. If they attempt to provide for individual differences, they usually only give differentiated assignments. Seldom does a teacher attempt to direct the actual reading procedures of lower groups during their reading periods in social studies, though the practice is common in lower-grade "reading" periods. It is not surprising, therefore, that progress is slow. Perhaps it will continue to be slow until social-studies teachers take more university courses in the teaching of reading and until middle- and upper-grade teachers use for their extremely retarded groups the techniques common in primary-grade reading classes.

A completely different curriculum for nonreaders.—The discussion up to this point may have left the impression that all cases of reading disability can be remedied by the right start and by specialized treatment later. Monroe and Backus[1] give the percentage of problem cases that can be remedied in the classroom as 96. Whether or not exactly that percentage is correct, there is general agreement among students of the subject that it runs high. In the future, therefore, teachers will probably be less ready to lay the blame for lack of progress on the child's intelligence and will recognize instead that in most cases their own methods and materials, their practical applications of the existing theoretical discoveries, and the curriculums are the determining factors. Nevertheless the remaining 4 per cent of the pupils constitute for the ordinary classroom teacher a problem the magnitude of which is out of all proportion to the numbers involved. For out of these 4 per cent come many of the severe problem and disciplinary cases.

[1] Marion Monroe, Bertie Backus, and Principals, Counselors, and Teachers of the Washington, D.C., Public Schools, *Remedial Reading*, p. 151. Boston: Houghton Mifflin Co., 1937.

Clinical help is critically needed in determining whether a given case belongs in this group or in the larger group of emotional disturbances and slow learners, and this help is not available in the great majority of schools. On the other hand, many schools probably do not make use of facilities which might be available to them through their state departments of education or through nearby universities. (In these days of constant automobile travel even three or four hundred miles do not constitute an insuperable obstacle.)

If a clinical psychologist has recommended that a given child be placed in a "special class," the responsibility of deciding is lifted from the teacher's shoulders. If she has no such assistance and has tried every remedial measure within her resources, all of which have failed, she probably will be doing what is best for the child if she provides for him a curriculum built almost entirely around direct experiences. Academically minded teachers have often been loath to take this step. They have preferred to keep almost full-grown boys of thirteen to fifteen grinding away on primary readers, even though no mastery of reading was forthcoming, because they felt that the children "ought to learn" it. They have refused to size up the situation realistically.

Social-studies teachers too have often felt that history and geography were prime necessities for every pupil regardless of whether the pupil seemed to profit from them. If a child is profiting not at all from one type of curriculum (even though that curriculum be the most desirable possible from the point of view of citizenship and personality training *in general*), he should be given another curriculum from which he can draw at least some benefit. Valuable as a mastery of reading is, it is not the only type of experience which can lead to better personal and social development.

In case a particular child has been unable to profit by the instruction provided and the teacher cannot learn how to diagnose his difficulties, the teacher and the principal together could probably work out for him an experience curriculum which would at least meet his needs better than the academic one. For some of the 4 per cent—the difficult cases—such a solution seems amply justified.

ESTIMATING THE QUOTIENT BY TWO METHODS IN DIVISION WITH A THREE-FIGURE DIVISOR

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Two widely known methods for estimation of the quotient when the divisor contains more than one figure are the apparent method and the increase-by-one method. If a two-figure divisor is considered, in the apparent method, the guide (tens') figure remains unchanged regardless of the units' figure. In the increase-by-one method the guide figure is increased by one when the units' figure is 6 or more. When the divisor is a three-figure number, the hundreds' figure is the guide figure. In the increase-by-one method the guide figure will be increased by one when the tens' figure is 6 or more.

Studies showing the relative effectiveness for producing the true quotient by the two methods, when the divisor is a two-figure number, were made by Knight,[1] Buckingham,[2] Grossnickle,[3] Upton,[4] and Osburn.[5] Although each of these studies deals with the same problem, the results are different in all of them. Some of the variation in the results is due to the lack of agreement on the meaning of a

[1] F. B. Knight, "Some Aspects of Elementary Arithmetic," *Curriculum Problems in Mathematics*, pp. 41–48. Second Yearbook of the National Council of Teachers of Mathematics. New York: Teachers College, Columbia University, 1927.

[2] B. R. Buckingham, "The Training of Teachers of Arithmetic," *Report of the Society's Committee on Arithmetic*, pp. 378–80. Twenty-ninth Yearbook of the National Society for the Study of Education. Bloomington, Illinois: Public School Publishing Co., 1930.

[3] Foster E. Grossnickle, "How To Estimate the Quotient Figure in Long Division," *Elementary School Journal*, XXXII (December, 1931), 299–306.

[4] Clifford B. Upton, "Making Long Division Automatic," *The Teaching of Arithmetic*, pp. 251–89. Tenth Yearbook of the National Council of Teachers of Mathematics. New York: Teachers College, Columbia University, 1935.

[5] W. J. Osburn, "The Curriculum in Long Division (Abstract)," *Reconstructing Education through Research*, pp. 226–27. Official Report of the American Educational Research Association, 1936. Washington: American Educational Research Association of the National Education Association, 1936.

two-figure divisor. In some studies two-figure numbers ending in zero, such as 40, were considered, and in others they were not.

Although there are investigations dealing with a two-figure divisor, there are no reported studies for a three-figure divisor. This study shows the relative effectiveness of the apparent method and the increase-by-one method for finding the quotient figure when the divisor is a three-figure number. Any three-figure number that is not an exact multiple of 10 is considered as a three-figure divisor. Thus, 120 is not considered because this divisor is equivalent to estimating the quotient with a two-figure number. It follows that a

TABLE 1

ACCURACY OF ESTIMATED QUOTIENT WHEN APPARENT METHOD OF ESTIMATING QUOTIENT IS USED FOR THREE-FIGURE DIVISORS THAT ARE NOT MULTIPLES OF TEN

Divisor	Estimated Quotient Is True Quotient	True Quotient Is One Less	True Quotient Is Two Less	True Quotient Is Three Less	True Quotient Is Four Less	True Quotient Is Five Less	Number of Estimations Possible
101–99..	34,702	40,255	29,354	20,119	9,670	900	135,000
201–99..	84,899	87,375	43,053	9,673	.....	.....	225,000
301–99..	148,305	131,525	34,535	635	.....	.....	315,000
401–99..	221,173	165,154	18,673	.....	.....	.....	405,000
501–99..	300,866	185,770	8,364	.....	.....	.....	495,000
601–99..	385,375	196,750	2,875	.....	.....	.....	585,000
701–99..	473,056	201,388	556	.....	.....	.....	675,000
801–99..	562,500	202,500	.....	.....	.....	.....	765,000
901–99..	652,500	202,500	.....	.....	.....	.....	855,000
Total	2,863,376	1,413,217	137,410	30,427	9,670	900	4,455,000

divisor of 200 is not considered in this study because this divisor is equivalent to estimating the quotient with a one-figure number. When the exact multiples of 10 are eliminated, there are 810 three-figure divisors.

The results by use of the apparent method are shown in Table 1. As a means of conserving space, the divisors are grouped into nine groups, one group for each guide figure. Within each group there are 90 divisors. Thus the first group includes all the three-figure numbers from 101 to 199, inclusive, except the exact multiples of 10.

The results by the increase-by-one method are shown in Tables 2 and 3. In Table 2 the results are the same as for the apparent

method for the same divisors. In Table 3 the guide figure is increased by one in arriving at the apparent quotient.

TABLE 2

ACCURACY OF ESTIMATED QUOTIENT WHEN INCREASE-BY-ONE METHOD OF ESTIMATING QUOTIENT IS USED FOR CERTAIN THREE-FIGURE DIVISORS THAT ARE NOT MULTIPLES OF TEN

Divisor	Estimated Quotient Is True Quotient	True Quotient Is One Less	True Quotient Is Two Less	True Quotient Is Three Less	True Quotient Is Four Less	Number of Estimations Possible
101–59	23,902	25,798	14,668	5,562	270	70,200
201–59	61,802	51,915	10,464	19	.....	124,200
301–59	108,305	66,890	3,005	.....	.....	178,200
401–59	159,679	72,142	379	.....	.....	232,200
501–59	213,300	72,900	.....	.....	.....	286,200
601–59	267,300	72,900	.....	.....	.....	340,200
701–59	321,300	72,900	.....	.....	.....	394,200
801–59	375,300	72,900	.....	.....	.....	448,200
901–59	429,300	72,900	.....	.....	.....	502,200
Total	1,960,188	581,245	28,516	5,581	270	2,575,800

TABLE 3

ACCURACY OF ESTIMATED QUOTIENT WHEN INCREASE-BY-ONE METHOD OF ESTIMATING QUOTIENT IS USED FOR CERTAIN THREE-FIGURE DIVISORS THAT ARE NOT MULTIPLES OF TEN

Divisor	Estimated Quotient Is True Quotient	True Quotient Is One More	True Quotient Is Two More	Number of Estimations Possible
161–99	36,795	25,410	2,595	64,800
261–99	69,037	31,576	187	100,800
361–99	104,400	32,400	.....	136,800
461–99	140,400	32,400	.....	172,800
561–99	176,400	32,400	.....	208,800
661–99	212,400	32,400	.....	244,800
761–99	248,400	32,400	.....	280,800
861–99	284,400	32,400	.....	316,800
961–99	320,400	32,400	.....	352,800
Total	1,592,632	283,786	2,782	1,879,200

A summary of Tables 1, 2, and 3 is shown in Table 4. Table 4 also shows the relative accuracy of the estimated quotients when the divisor contains two figures and when it contains three figures. From

Table 4 it is seen that the percentages of estimations for each classification of the quotient are about the same by the apparent method when the divisor is either a two-figure or a three-figure number. Table 4 shows that these percentages are about the same for both

TABLE 4

SUMMARY OF RESULTS SECURED BY USE OF APPARENT AND INCREASE-BY-ONE METHODS WHEN DIVISOR CONTAINS TWO AND THREE FIGURES

True Quotient Is—	Two-Figure Divisor*		Three-Figure Divisor	
	Number of Possible Estimations	Per Cent	Number of Possible Estimations	Per Cent
	Apparent Method			
Estimated quotient	28,485	63.94	2,863,376	64.28
One less than estimated	14,382	32.28	1,413,217	31.72
Two less than estimated	1,304	2.93	137,410	3.08
Three less than estimated	286	0.64	30,427	0.68
Four less than estimated	88	0.20	9,670	0.22
Five less than estimated	5	0.01	900	0.02
Total	44,500	100.00	4,455,000	100.00
	Increase-by-One Method			
Estimated quotient	34,850	78.23	3,552,820	79.75
One less than estimated	5,468	12.27	581,245	13.05
Two less than estimated	239	0.54	28,516	0.64
Three less than estimated	43	0.10	5,581	0.12
Four less than estimated	.....	.....	270	0.01
One more than estimated	3,890	8.73	283,786	6.37
Two more than estimated	60	0.13	2,782	0.06
Total	44,550	100.00	4,455,000	100.00

* Foster E. Grossnickle, *op. cit.*, p. 304.

kinds of divisors when the increase-by-one method is used. Table 4 shows that the increase-by-one method gives the correct quotient figure in a larger percentage of cases than does the apparent method. It is seen that by the increase-by-one method the estimated quotient will be the true quotient or one removed from the true quotient in

99.17 per cent of the cases for a three-figure divisor. Since one removed from the estimated quotient by this method may be either one more (+1) or one less (−1), the true range is two. If the apparent method is used, the estimated quotient will be the true quotient or within a range of two in 99.08 per cent of the cases when the divisor is a three-figure number. The two methods are, therefore, about equally effective for finding the true quotient figure when the range of corrections is within two of the estimated figure.

The possibility of interference for a three-figure divisor is much greater for the increase-by-one method than for the apparent method. When the increase-by-one method is used with a two-figure divisor and the units' figure is 6 or more, the guide figure is increased by one. When the divisor is a three-figure number, the tens' figure is used for deciding whether the guide figure is to be increased. This change in position of figures may cause interference. If the divisor is 218, the pupil may change the guide figure to 3 because of the value of the units' figure, 8. In that case most of the estimations will have to be corrected. On the other hand, if the divisor is 281, the pupil may not increase the guide figure because of the units' figure, 1. The chief benefit which accrues from the increase-by-one method will, therefore, be neglected. For that reason it seems to be a matter of prudence to teach a one-rule procedure. The writer strongly recommends that only the apparent method be used for teaching estimation of the quotient in division when the divisor contains more than one figure.

SUMMARY

This study was made to compare the relative accuracy of the apparent and the increase-by-one methods for estimation of the quotient when the divisor is a three-figure number. In either method the percentage of accurate estimations is about the same for a three-figure divisor as for a two-figure number. When the divisor is a three-figure number, there is a possibility of interference by the increase-by-one method so that the pupil may not know when to increase the guide figure. A one-rule procedure—the apparent method—should, therefore, be used for estimation of the quotient.

SOCIAL CONSCIOUSNESS—A MAJOR OBJECTIVE OF HEALTH EDUCATION

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SINCE the results of health instruction are continually on display in the overt behavior of the individual, the effectiveness of the health-education program of the elementary school is ever being questioned. As a means of improving the worth of health education, much effort has been made to measure gains in health knowledge, and attempts have been made to determine changes in habits and attitudes which may be attributed to school learnings. Probably there is no better way to evaluate any health program and to plan for improvement than to observe the product—the behavior of the school graduates. In this method the way of living and the attitudes reflected by this behavior are under examination. Since interpretation of behavior is subjective at best, it is conceded that some of the conduct cited here may be grossly misunderstood. From the point of view, then, of the observable behavior of the graduates, is health instruction in the schools producing the desired results?

The usual curriculum in hygiene recommends that personal hygiene be studied first and that this course be followed by community health problems. Although personal hygiene should include consideration of behavior which affects others, in practice the attention is directed chiefly toward the development and the maintenance of an optimal functioning mechanism, while interest in the care and the protection of others, or social welfare, is left for community hygiene. That progress has been made in interesting boys and girls in personal development is undoubted; advancement in habits of cleanliness and pride in appearance are increasingly apparent, whether the credit be due to the movies, to cosmetic advertisers, or to school instruction in hygiene. There is no question that the adolescent's behavior shows desire for, and increased attainment of, a more beautiful, efficient body machine.

What evidence is there in the graduate's behavior of his active concern in the welfare of others? Possibly the effort to interest pupils in more healthful living has resulted in overemphasis of the self, to the neglect of consideration of health problems that affect others. Too much concentration on personal development results in introverted thinking. Indeed, medical science has often pointed to the dangers of too much introspection in health-teaching. Objective thinking is desirable for mental health, and the health program is especially fitted to contribute to the development of this habit. It is not difficult to understand that an altruistic viewpoint is fundamental to the teaching of community hygiene. But how can personal hygiene be taught to emphasize anything but the person? By introducing the subject matter with reference to others rather than to the self. For instance, when health workbooks and inventories ask the pupil to check his sleeping hours, his diet, or what not, the same learning could be promoted by having the learner observe the habits of younger brothers or plan the sleeping schedule or diet for athletes, for friends, or others. The child, if he has been influenced by the study, is clever enough to apply the information to himself.

That the teaching of hygiene is taking advantage of an already overdeveloped self-interest is revealed in a recent advertisement of a health workbook for high-school girls, in which the author acknowledges that interest in personal appearance and development is used to motivate the work because this interest is a predominant characteristic of girls. If this trait were only temporary and adolescent, the idea of teaching health in this manner might be commended. A survey of adults would not, however, reveal that such is the case. Is not the prevalent gum-chewing among adults evidence of a self-centered lack of consideration of others? Whether the gum is chewed to aid the digestion, shine the teeth, purify the breath, or soothe the nerves, the individual seems entirely unaware of the discomfort of those forced to hear and watch the performance of caring for the self. The adults who run their radios at full blast far into the night surely are not thinking of the pleasure or welfare of the neighbors who are trying to sleep. The unsightly toilets, not only in public stores, theaters, and service stations, but in graduate teachers' colleges, proclaim the same characteristic—self-interest.

Selfishness in matters that concern health can be combated by directing attention toward a recognition of the rights of others. On this ideal of social consciousness depends the health of a community. Little can be accomplished in improving the health of a people by passing legislation, by providing better housing, by supplying necessary health agencies, unless these are accompanied by education. By "education," however, is meant more than the dissemination of knowledge. The dentist of a small town who, with his fellow-citizens, handles the garbage problem by discarding the kitchen refuse from open car windows, thereby avoiding the bill for private garbage collection, is not lacking in knowledge of sanitation. Neither are the householders who empty their accumulated trash in nearby streams, totally disregarding the pollution and the hazard to swimmers of tin cans and glass. Persons guilty of these and other nuisances are not ignorant of the results. No more are the customers who talk and cough over the meat, handle the fruit, or smell the cheese. Certainly knowledge is not *the* determining factor in a functioning education.

The real test of education is action. Can health education stand this test? Inside the school, progress has been made, for elementary-school children are rather punctilious about observing certain health habits. Do these habits carry over into a different environment? Most of the restaurant waitresses are at least elementary-school graduates, many of them high-school graduates. Back in their school days did they not learn to wash their hands when leaving the toilet and after using a handkerchief when handling food? Back in the home-economics laboratory did the housekeepers of today taste from the spoon that they were using, sneeze and cough in the kitchen? What has become of the habits seemingly learned in school? Handlers of food are credited with being profuse spreaders of respiratory diseases. What is the reason for the discard of the habits which were practiced in school and which are important to the public welfare? Have *all* the college students who habitually start their study at midnight had no bedtime regulations? It does not take research to discover that the best of habits do not carry over unless there is reason for the persistence.

Is knowledge enough to stimulate the practice of certain behavior? In the cases cited above, the waitress, the housewife, the college

student could undoubtedly pass a written examination covering the information related to the specific hygiene rule violated. Knowledge of the reason for the desirability of certain health habits does not insure the practice of the habits. Adding the third and the most important element, attitudes or desires, makes the health program more potent. Although these attitudes, which are the motivating power for learning and for practicing ways of acting, are not unchangeable and their development in early life does not insure continuance of the specific desires, it is generally accepted that character development is largely dependent on early environment.

What are the attitudes which the health program in the elementary schools is emphasizing? A study of the health curriculums of a large number of schools reveals that attention is first paid to attitudes related to personal health. The desires mentioned most frequently are the desire for personal cleanliness; the desire for a beautiful strong body, good carriage, healthy skin, hair, nails, teeth; a liking for certain foods; the desire for a proper amount of sleep; etc. Community hygiene is postponed usually until junior high school, with the idea seemingly that, after the child knows how to care for the self, he can broaden his interests to include the health of others. If community hygiene is dependent on the presence of social consciousness, it would seem that more effort should be made to develop this ideal early in life. In the building of a healthful community there is need for a people who take cognizance of the consequences of their acts. This learning requires years of practice. In the nursery school it is achieved when the child picks up his toys, not merely because a safety regulation so provides or because all children should possess this habit, but because he does not want to injure others by leaving his toys where children may trip over them. The child then becomes the protector of others and has developed the socially desirable attitude.

Evidence that the young automobile-driver does not realize his duty to society is shown in the accident rate involving boys of high-school and college ages. Many college students have been questioned concerning the reasons for accidents, and the general trend of the answers would lead one to believe that insufficient regard for others rather than unqualifying technical ability in driving is the cause. It

is not lack of knowledge of the damage incurred when a vehicle moving at a certain speed strikes an object; it is not lack of knowledge of the financial loss due to accidents; it is not lack of knowledge of the physical disablement accompanying accidents; it is, according to those questioned, thoughtlessness—a total disregard of everything except the acquiring, at any cost, of what is desired at the moment. Experiments of all sorts have been tried in an effort to impress the young criminal. The driver involved has been forced to visit morgues, and he has been taken to hospitals to see the results of accidents. High schools, hoping to decrease the incidence of automobile accidents, have inaugurated courses in driving. Yet the rate involving young drivers does not decrease appreciably. Explaining his case, one young man of twenty-five years said, "I had to kill a friend of mine to learn." What seems to be lacking is feeling for the protection of others—the attitude that the health program might be emphasizing from the first days of school.

Possibly it is foolishly optimistic to believe that social consciousness can be developed in an acquisitive society. It may be that the altruistic point of view is so unnatural that selfishness should be expected to dominate quick response and that, only when thinking enters into the reaction, can one have regard for the consequences of one's action and behave socially. Perhaps this explanation might interpret behavior in the following instances. College girls frequently insist on swimming although they have colds because "it won't hurt me any." These students can recite the dangers of infection, communicability of the common cold, and rules of sanitation for swimming pools; yet they are willing to take a chance with the health of their classmates. Given time for thought, such students usually decide that they should protect their fellow-students. A similar type of response comes from college girls who demand that, while they study until one or two o'clock in the morning, their roommates learn to sleep with the light on, the windows closed, and frequently even with the radio running. This same thoughtless behavior is seen in the adult who draws the shade just far enough to protect his own eyes from the sun without thought of the others who are also troubled by the glare.

Since *all* individuals do not behave thus, it must be possible to

condition self-centered behavior even though it may be an instinctive expression of self-preservation. The person whose behavior is noticeably social is frequently recognized as "having a good background" or having had "good home training." The home environment seems to be given the full responsibility for the type of social conduct exhibited. In problems affecting the health of others is there not an opportunity, an obligation, for the school to take the initiative in modifying asocial behavior by helping the child to act intelligently rather than emotionally according to instinct? Since the possession of social consciousness is the basis of community hygiene (and an antidote for mental ill health), it might well be the leading objective of the school health program and be given special emphasis during early school life. If the child learns to think out all health problems in terms of "we," the foundation of a real public-health interest will be established. The school health program is the miniature community health program, and, if the child is going to develop the ideal of co-operation, of protection of the welfare of all, every opportunity should be grasped to turn his attention from "me" to "us."

AN EVALUATION OF HALF-DAY AND FULL-DAY SESSIONS IN THE FIRST TWO GRADES

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PROBLEM AND PROCEDURE

THIS investigation is concerned with the problems arising from a policy of using half-day sessions in about half of the first grades and in many second grades of the schools in Utah. The conclusion of the study should be of interest to at least thirty other states in which half-day sessions are also used in these grades. Six major problems have been considered in the investigation: (1) What is the present scope of a half-day policy both in Utah and in the remainder of the United States? (2) How does a half-day policy affect the attendance and the placement of pupils? (3) To what extent are time allotments curtailed by a half-day policy? (4) How is the teaching load affected by a half-day policy? (5) Are half-day sessions conducive to better health on the part of the pupils? (6) How does the achievement of pupils who have attended half-day sessions in the primary grades but have attended full-day sessions as they continued through the upper grades compare with that of pupils who have attended full-day sessions in all grades?

The selection of the phases of the problem to be studied was based on the inequalities in educational opportunities between half-day and full-day districts which were suggested in interviews with superintendents and other educational leaders. To obtain data, the writer found it necessary to consult original records, such as school-board minutes, superintendents' reports, and pupils' cumulative-record cards and test data. Practically every district in the state was visited in order to obtain these data and also to confer with superintendents, teachers, supervisors, school nurses, and school physicians. A comprehensive questionnaire check list was administered personally to the district superintendents. Letters of inquiry were

also sent to all first- and second-grade teachers in Utah using half-day sessions and to all state departments of education.

FINDINGS

The following are some of the principal findings from the comparisons made between the districts with half-day sessions and those with full-day sessions in the first or the second grade or in both grades.

1. *History and present scope of the policy of half-day sessions in Utah.*—As early as 1910 the practice of half-day sessions for first and second grades was known in Utah. The practice was greatly augmented in 1914–15, when the consolidation into districts caused a concentration of pupils into center schools. There were insufficient funds for the additional rooms and teachers' salaries which this concentration called for; hence a policy of half-day sessions for the first and second grades was resorted to in order that the pupils might be cared for.

In the school year 1934–35, 47.6 per cent of Utah's first-grade pupils attended half-day sessions. In the second grade the practice is declining; only 13.3 per cent of the second-grade pupils were affected by a half-session policy in 1934–35.

2. *Extent of the policy in other states.*—Twenty-four other states use half-day sessions in both first and second grades in many of their cities, and six states have half-day sessions in the first grade. In one state, Georgia, it is a regular state policy to use half-day sessions for the first grade.

3. *Provisions for pupils during half-day they are not in regular session.*—The majority of the pupils who attend half-day sessions are not at school during the other half-day. A small percentage, however, are at school and are often improperly cared for.

4. *Attendance.*—Over the four-year period 1931–34, inclusive, the average percentage of the first-grade pupils enrolled who were in average daily attendance was 91.4 for the full-day schools and 83.4 for the half-day schools, a difference in percentages of 8.0. The percentage in the half-day schools might be interpreted to mean that a sixth of the pupils, who are already deprived of a half-day of schooling, are not in regular attendance.

In the second grade, however, the percentages of attendance in half-day and full-day sessions were about the same, the percentage for the half-day schools being 1.1 more than the percentage for the full-day schools.

5. *Promotions and retentions.*—Over the four-year period 1931–34, inclusive, promotions and retentions through the first to the sixth grade were investigated. In districts and cities in which all first grades were on half-day sessions, only 78.6 per cent of the pupils were promoted and 3.6 per cent were retained. In the full-day districts and cities 88.5 per cent were promoted and 5.0 per cent were retained. The remainder of the pupils were reported to have "withdrawn" or "moved." The percentage of pupils promoted in half-day districts was approximately 10 less than the percentage in full-day districts.

6. *Retardation.*—Retardation in the first to the sixth grades was traced from 1925 to 1934. When comparisons were made grade by grade, there were no consistent differences in the amounts of retardation. However, when the percentages of all pupils retarded in the six grades were averaged for the whole period, it was found that in the half-day districts 31.6 per cent of the entire enrolment of the six grades had been retarded; in the full-day districts the corresponding percentage was 34.9.

7. *Length of the school day and the school year.*—The school day for first and second grades on half-day sessions is over one and a half hours shorter than that for the first and second grades on full-day sessions. When this daily deficiency is accumulated for a year, the result is that pupils on half-day sessions attend school only about five and a half months of full days per school year, or three and a half months less than the full-day pupils.

8. *Time allotments.*—The investigation of the time allotted to the various subject groups showed which subjects were necessarily affected by the shorter school day of the half-day sessions. A study of the teachers' programs showed that in the first grades on half-day sessions the two subjects of reading and arithmetic alone occupied 43 per cent of the school day, seventy minutes a day being allotted to reading and eight minutes to arithmetic. In the first grades on full-day sessions ninety-four minutes a day were allotted

to reading and sixteen minutes to arithmetic. The full-day grades had nearly a half-hour a day more to devote to reading than had the half-day grades, yet the half-day teachers felt that they must crowd their pupils to reach a reading average as high as that reached by the full-day pupils. In these same half-day first grades only 66 minutes a day were devoted to social studies, language, art, and music, and 24 minutes to health, recess, and supervised play; the full-day session first grades allotted 109 minutes daily to the first-named group and 39 minutes to the latter. In other words, the full-day first grades had almost a full hour a day more to devote to the socializing and cultural subjects of social studies, language, art, music, health, and supervised play.

In the second grades a somewhat similar situation obtained. The half-day districts allotted 66 minutes daily to reading, while the full-day districts allotted 101 minutes, a difference of 35 minutes daily. Both half-day and full-day districts again probably overemphasized arithmetic, the half-day allotment being 16 minutes and the full-day allotment 21 minutes. The half-day districts devoted only 82 minutes daily to social studies, language, art, music, health, and supervised play, while the full-day districts gave 131 minutes daily to these activities. The difference amounts to 49 minutes a day.

9. *Attitude of teachers and superintendents toward half-day sessions.*—There is general agreement among teachers and superintendents that teaching half-day sessions (1) is a greater strain on the teachers and requires excessive energy, patience, and endurance; (2) requires more time in class preparation to the extent of one and a quarter hours *daily;* (3) lengthens the actual hours for teaching by one and a half hours *daily;* (4) does not allow for sufficient time to give extra help to slow pupils; (5) does not allow time for the teacher to attempt seriously to provide for the inclusion of desirable activities within the teaching program. The average day for the teacher who has to teach half-day sessions is lengthened by two and three-quarters hours in all. No wonder that there is greater strain on the teacher! This factor is vital, not only in its effect on the mental health of the teacher, but also in its effect on the mental health of the pupils.

10. *Extent of the practice of teaching by an activity program.*—In

the half-day districts approximately a fourth of the first grades are taught by the type of program that tends toward the activity program. In the full-day districts about half of the first grades are taught by this type of program. It might be added that there are no purely "activity" schools in the state. However, in the second grades it seems that half-day sessions are not a hindrance to the adoption of some type of activity program.

11. *Health of pupils.*—Pupils of the first and the second grades in both half-day and full-day districts were examined for defects of eyes, nose, throat, posture, nutrition and weight, teeth, feet, heart, and ears. There were no consistent differences in the defects found in either the half-day or the full-day group, with the possible exception of defects of eyes and nose; the full-day sessions in both the first and the second grades had slightly higher percentages of these defects.

12. *Qualifications of first- and second-grade teachers.*—With respect to the number of years of experience of the teachers, it was found that the median for the half-day teachers was from five to six years and that for the full-day teachers from three to four years. As to training, 96.3 per cent of the half-day teachers and 92.5 per cent of the full-day teachers had been trained to teach in the primary grades; 10.5 per cent of the half-day teachers and 16.9 per cent of the full-day teachers had college degrees. The recency of the professional training, as evidenced by summer-school courses, correspondence courses, and the like, was about the same for the two groups. The training and the experience of the two groups did not greatly differ.

13. *Standard-test results.*—The chief criticism of this part of the study lies in the inadequacy of the means of measurement. Since there are no adequate measuring devices available for the most valuable end products of learning, such as co-operative living, formation of attitudes, ideals, dispositions, appreciations, interests, and enjoyments, these important results were not measured. Only such tangible results as achievement in a few academic subjects, which are largely means to the greater ends of the more desired results, could be measured.

a) A group of ninety-six pupils who had attended half-day ses-

sions in the first and the second grades were equated on the basis of intelligence quotient with a group who had attended full-day sessions in these grades. The median intelligence quotient of each group was 102.3. Results on the Gates Primary Reading Test and the Stanford Achievement Test through the first to the fourth grades show that both groups were a little over one month above the norm in grade placement at the end of their fourth year. This grade placement is approximately what would be expected of pupils with an intelligence quotient of 102.3 who had had average educational opportunities. Is it reasonable to conclude that the half-day group gained a rating as high as that of the full-day group because of overemphasis on academic subjects and a consequent neglect of other studies, such as health, art, and social studies?

b) A group of 201 pupils with a median intelligence quotient of 97.8 who had attended half-day sessions in the first and the second grades was compared with the standard norms for the first to the fourth grades. By the end of their fourth year this group was two months above the norms in grade placement on the same tests as were used with the previously mentioned group. The conclusion to be reached seems to be that these half-day pupils were probably crowded beyond what should have been reasonably expected of pupils having an intelligence quotient of 97.8, whether they were half-day or full-day pupils.

c) Another group of 219 pupils with a median intelligence quotient of 93.8 who also had attended half-day sessions in the first and the second grades was compared with the standard norms for the first to the fourth grades. By the end of their fourth year the grade placement of this group was one month *below* the norm on the Gray Oral Reading Paragraphs in the first grade and on the Stanford Achievement Test in second, third, and fourth grades. The fact that pupils with a median intelligence quotient of 93.8 fell only one month below the norms would indicate that they had been crowded to make such a showing. It might also be inferred that this group of half-day pupils was over-drilled in the subjects mentioned at the expense of the socializing subjects.

d) Three groups of twenty-two pupils each from the same district were equated on the basis of intelligence quotient, and test

results on the Stanford Achievement Test were compared from the first to the sixth grade. The median intelligence quotient of each group was 106. One group had attended half-day sessions in the first and the second grades, the second group had attended full-day sessions in both the first and the second grades, and the third group had attended half-day sessions in the first grade and full-day sessions in the second grade. By the end of their sixth year the last-named group was exactly at the norm in grade placement. Both the other groups were about two months above the norm. The results from these groups seem to indicate that, by the time pupils have finished the sixth grade, standing in *academic* subjects is in accord with what would normally be expected of pupils with an intelligence quotient of 106, regardless of whether they have attended half-day or full-day sessions in the first two grades.

e) Other groups, aggregating twelve hundred pupils, who had attended half-day sessions in both the first and the second grades were tested in the third to the sixth grades in arithmetic, reading, and geography. The median intelligence quotient of these pupils was 104. The medians of these groups in all tests were above the norms to the average extent of five months. Several tests were used, but all were interpreted on the common ground of grade-placement norms.

Test results from these groups also point to the conclusion that, with the educational methods followed, half-day sessions are not a deterring factor to the pupils' achievement. Pupils attending half-day sessions can reach a score equally as high as that reached by full-day pupils. These results, as well as those from the groups discussed in paragraph *d*, also point to the fact that differences (if there ever were any in the first place) in standing in academic subjects between the half-day and the full-day groups are obliterated by the time the pupils pass the sixth grade. It should be remembered, however, that these tests measure standing in academic subjects only. Other values, such as ideals, attitudes, and abilities are not measured. In other words, only the measuring tools of a traditional philosophy and practice of education were available in the attempt to measure the results of a newer, "progressive" educational philosophy and practice. It seems valid to conclude also that this group of

pupils were somewhat crowded to reach scores above the norm to the extent of five months in grade placement, when their average intelligence quotient was only 104.

IMPLICATIONS

Who can estimate the losses that the half-day pupils have suffered from the curtailment of training in social sciences, health, supervised play, music, and art? Who can say what they have lost from having been, in their first two years of school life, under the tutelage of teachers who admittedly worked under strain and for relatively long school days? Again it should be mentioned that the inability to measure social and cultural factors is a great detriment in measuring the efficiency or the inefficiency of half-day sessions.

There are many values in living in school besides the definite and measurable acquisition of items of subject matter. Such values as the development of ideals, attitudes, and dispositions, the power to solve problems, the ability to share with the group, and the development of a capacity to help lead and direct and to take one's part in the affairs of the group are not measurable by objective means at the present time. Yet such things are the essence of education. They are not learned hurriedly or by precept; they are gradually built up through practice in fitting situations. There is no particular virtue of itself in making exceptionally high scores in reading, arithmetic, and spelling, especially if these abilities are acquired at the expense of social training which should take place in an unhurried and democratic atmosphere. The schools must, if they are to function properly, provide a program which allows ample time to meet these social needs. The teachers must have the time and the desire to carry out such a program—without hardship on themselves. In a democracy all children should have equal educational opportunities to acquire habits of healthful, co-operative living. It is not reasonable to believe that children attending school for only a half-day will have educational opportunities equal to those offered pupils who attend full-day sessions. Such educational implications as these must be taken into account in any attempt to judge adequately the merits or the disadvantages of a policy of using half-day sessions in the first and the second grades.

PUPIL ADJUSTMENT IN THE HIBBING PUBLIC SCHOOLS

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AN INTENSIVE study of pupil personnel has been made in the Hibbing public-school system for the past three years. The study began as a part of the state-wide testing program of the Minnesota State Testing Committee, which in turn is affiliated with the Coordinated Studies in Education.

In the autumn of 1935–36 the Boynton B.P.C. Personal Inventory was administered to 917 pupils in Grades V–VIII. The test was given for the purpose of detecting personality, scholastic, and conduct abnormalities.

During the school year 1936–37 fifty-two pupils were selected for intensive study on the basis of the scores previously attained on the Boynton test. Pupils were chosen whose performances were below the standards set forth by the Minnesota State Testing Committee, namely, conduct, 66; scholarship, 66; and personality, 55. Complete case studies, based on the Torgerson Diagnosis of Pupil Maladjustment, were made of these fifty-two pupils. After the Torgerson diagnosis, a remedial program, centering in a system of counseling, was planned for the school year 1937–38. All cases available at the opening of school in the autumn were assigned to counselors.

RESULTS OF THE BOYNTON INVENTORY

Table 1 shows that, of the fifty-two cases selected by use of the Boynton B.P.C. Personal Inventory, fifteen, more than a fourth, of the pupils were found to present no particular problems. At the junior high school level eight out of thirty-seven pupils, almost a fourth of the cases, presented no problems, whereas in the elementary grades more than half the pupils studied were maladjusted. These figures would indicate that, insofar as the cases selected by the Boynton Inventory disclosed, adjustment is more likely to take

place at an early age and that, as pupils grow older, they become more decidedly either normal or maladjusted.

The proportion of pupils (over a fourth) selected by the Boynton Inventory who proved not to be maladjusted would indicate either that this test is not entirely reliable in selecting problem cases or that it selects cases not readily recognizable by teachers. It is valu-

TABLE 1

NUMBER OF BOYS AND GIRLS AT ELEMENTARY AND JUNIOR HIGH SCHOOL LEVELS SELECTED AS MALADJUSTED BY BOYNTON B.P.C. PERSONAL INVENTORY

Sex and School Level	Number of Cases Selected by Boynton Inventory	Number of Cases Proving To Be	
		No Special Problem	Maladjusted
Boys:			
Elementary	12	5	7
Junior high	29	7	22
Total	41	12	29
Girls:			
Elementary	3	2	1
Junior high	8	1	7
Total	11	3	8
Boys and girls:			
Elementary	15	7	8
Junior high	37	8	29
Total	52	15	37

able in selecting pupils with maladjustment tendencies but obviously does not always eliminate the selection of normal children, nor does it detect all types of maladjustment. This defect is characteristic of other personality tests of a similar nature.

COMPARISON OF BOYS AND GIRLS

Table 1 shows the number of boys considered maladjusted as compared with the girls. Among the total number of cases studied, there were 3.7 times as many maladjustments among the boys as among the girls. This difference is probably attributable to the fact

that girls are more responsive to suggestion, seem to apply themselves better, and are more easily interested in school and home activities, than are boys.

CAUSES OF MALADJUSTMENT DETERMINED THROUGH THE TORGERSON DIAGNOSIS

Full case records were made, by means of the Torgerson material, of the pupils selected for special study. Pupils in the elementary grades were assigned to teachers in whose rooms they were enrolled. In the junior high school the pupils were assigned to teachers under whose charge the principal amount of their class work was done. A diagnosis of the cases revealed numerous causes of maladjustment. The chief source of difficulty for most of the children was lack of intelligence, poor home environment, or some physical deficiency, or a combination of two or all three.

A majority of the pupils were classified as either low normal or dull in intelligence. As a result of their limited mental capacity, such pupils were usually retarded and were losing interest in their school work, and some were becoming annoying behavior problems.

Inadequate home environment was a serious handicap in one-third of the cases. Inadequacies of the home were due to unwholesome environmental conditions, marital discord, poverty, the death of a parent or of both parents, poor management, the limited use of English in the home, and the existence of few or no cultural interests. Weaknesses of the home were invariably reflected on the children. Teachers were aided in the study by the visiting teacher, who made a thorough check of each pupil's home environment and out-of-school interests.

Physical deficiencies were manifest in about a third of the children diagnosed in the study. Defects were largely neglected teeth, impaired vision, defective hearing, enlarged tonsils, troublesome adenoids, faulty diet, poor posture, uncleanliness, kidney trouble, rupture, epilepsy, and disabilities resulting from infantile paralysis. The school's health department was highly co-operative in checking the health and the physical status of the pupils studied.

Other cases of maladjustment were attributed to unfortunate pupil-teacher relationships, poor personal and study habits, slight interest in school, and personality defects. Several boys had younger

sisters who were somewhat brighter and overshadowed the dull brothers. About half the pupils in the elementary grades had attended more than one school, adjustment thereby being made even more difficult.

The maladjustments were most frequently encountered among pupils who were mentally slow, nervous, moody, or behavior problems. Nervousness or restlessness resulted largely from physical conditions. The moody often withdrew to a world of fantasy. Behavior problems were more pronounced among the older pupils, the children of the elementary grades giving practically no difficulty in matters of conduct.

RESULTS OF COUNSELING

After the causes of maladjustment had been diagnosed, attempt was made to help these handicapped pupils overcome their difficulties. They were assigned in the autumn of 1937 to fourteen of the schools' twenty counselors. Ordinarily the plan of counseling provides for at least two conferences with each pupil in the junior and the senior high schools during the school year. The pupils selected for the present study were placed in the hands of counselors for continuous observation, and the counselors were allowed complete freedom with regard to the number of conferences or interviews. A summary of the previous year's study, case histories of the pupils who were assigned to them, and brief recommendations on how to deal with each case were made available to individual counselors. Counseling consisted chiefly in aiding pupils in making programs of studies, giving friendly advice on personal problems, encouraging pupils to look after their grooming and physical needs, offering suggestions on how they might improve their school work, and giving guidance in prospective occupations.

Of the original fifty-two cases in the study, only thirty-seven had been found to be definitely maladjusted. However, all the original cases that were available at the beginning of the school year were included in the follow-up. Forty-four cases were left on the list, but six of these did not re-enter in the autumn. One pupil moved out of the state; one entered a sanitarium; one transferred to another school system; one had dropped out before the close of school in the preceding year; and the other two, having passed the legal school age of

sixteen, failed to enter at the opening of school in September. The remaining thirty-eight were assigned to counselors. Of this number, twenty-five cases (66 per cent) showed improvement and were helped through counseling by the end of the year. Marked improvement was shown in eight cases, slight improvement in fifteen, and two offered no problems whatever. No improvement was shown in seven cases. Of the remaining six cases, three dropped out of school, one was expelled for irregular attendance, and two enrolled in C.C.C. camps.

PHYSICAL EFFICIENCY AND HEALTH STATUS

The school's health department re-examined the pupils who had been previously diagnosed as needing medical attention. Fourteen of the original seventeen such pupils were available for re-examination. Most of these cases had been placed under a doctor's care or had made some effort to correct their physical defects. As most of the deficiencies were of a correctable nature, pupils responded well to treatment. Of the fourteen cases who were re-examined, ten showed varying degrees of improvement. Two of this number are still under regular treatment. Counselors were furnished with a copy of the health department's report on the physical status of each pupil, which materially aided in dealing intelligently with the case.

REPORT ON INDIVIDUAL CASE STUDIES

A full report on all cases handled by counselors is too lengthy to give in this article. Summary reports of a few cases are given as indicative of the results.

CASE 2. BOY—AGE 13, GRADE VII (SWEDISH)

Diagnosis, 1936–37.—Normal mentality, but a slow worker and poor reader. His difficulties may be attributed largely to a physical difficulty and the fact that both parents are deceased. A rupture causes restlessness and, in turn, listlessness following frequent attacks. He appears very quiet, is by himself a great deal, and seems quite unhappy because of the death of his mother, to whom he was very devoted. Consequently he has few home interests. Older brothers and sisters support the family. Doctor recommends surgery this spring.

Counselor's report, 1937–38.—The health department now reports his physical condition good. He is a slow worker and rather listless at times but is a nice child in school and no behavior problem whatever. He has been on the school safety patrol this year. He has outside interests and seems to be contented and happy.

CASE 3. BOY—AGE 14, GRADE VIII (CROATIAN)

Diagnosis, 1936–37.—Low normal; repeating his grade this year; has attended three different schools. Does not apply himself; now feels himself too big for the grade; somewhat of a bully. The mother is too protective for the child's own good. He likes school better this year. Best appeal is through giving him responsibilities. Likes athletics and does well in art.

Counselor's report, 1937–38.—Work this year is fair, with best work in woodwork and English. Almost all teachers report improvement in work and attitude since the first of the year. In woodwork he is the best pupil in the class, helping those behind in their work and co-operating in every way. Arithmetic is the only subject which shows no improvement.

CASE 11. BOY—AGE 15, GRADE VIII (YUGOSLAV)

Diagnosis, 1936–37.—Low normal; over-age for present grade. Quiet and unobtrusive in the schoolroom and on the playground, but not to the extent of being apathetic. Very irregular in school attendance; slight interest in school. Much marital discord in family to the extent of complaints being aired before the municipal court judge. Home strife obviously reflected upon the children.

Counselor's report, 1937–38.—Work this year indicates improvement. His report card shows nine failures for the first semester and only one in the second semester. His attendance has been quite regular, with eight and one-half days against him. He is somewhat shy about oral work, but his written work is good. Although there have been a few complaints about conduct, his attitude has been generally good.

CASE 18. GIRL—AGE 14, GRADE VIII (YUGOSLAV)

Diagnosis, 1936–37.—Her chief problem seems to be a feeling of inferiority. She lacks confidence, has few friends, is retiring and submissive, and exhibits no persistence nor curiosity. Teeth need remedial treatment. Personal appearance: old-fashioned hair and dress, one eye slightly crossed. Nervous and irritable. Needs sympathetic guidance by teachers and opportunity to take hold of herself by doing extra tasks and being stimulated in interest.

Counselor's report, 1937–38.—She has improved in retention and scholastic ability, her grade-point average rising from 1.46 in October to 2.57 in April. Science, which was listed as a weak subject, has now become a strong subject. Reading is still weak. Her attendance throughout the year has been excellent. Her personal appearance shows marked improvement. Her beautiful hair is well cared for, and her general appearance is neat.

CASE 43. GIRL—AGE 17, GRADE IX (BELGIAN)

Diagnosis, 1936–37.—Has few friends and outside interests, depressed, lacks self-confidence, doesn't ask teachers for help, over-age (started school late because of ill health). Weak in arithmetic; dislikes teachers. Was given opportunity of changing teacher in February, but since this arrangement would require change of teacher in history, in which she does very well, her mother did not wish her to be taken out of class or conferred with about her problems.

Counselor's report, 1937–38.—Normal mentality, but health is poor. She does reasonably good school work. Her attitude is favorable to good work, but she is absent frequently because of ill health. She is now, and has been, under the care of the Duluth Clinic and is having everything possible done for her.

CONCLUSIONS AND IMPLICATIONS

The Boynton B.P.C. Personal Inventory proved to be of value in identifying pupils who were maladjusted. It did not consistently eliminate the selection of normal children, nor did it detect all types of maladjustment. It was helpful, however, in that three-fourths of the pupils selected by the test proved to be maladjusted.

Case-study records based on the Torgerson Diagnosis of Pupil Maladjustment were invaluable in furnishing a thorough check of all pupils in the study. Causes of maladjustment were principally low intelligence, poor home environment, and physical deficiency.

Counseling of maladjusted pupils during the school year proved to be effective in two-thirds of the cases. A number of these pupils need continued attention and would profit by further counseling.

An intensive study of pupil personnel such as this brings forcibly to mind the fact that, in order to make effective use of remedial measures for problem cases, teachers and counselors must have a full knowledge and understanding of the underlying causes of maladjustment. Such knowledge requires thorough study of the child in school and also complete information on outside interests and home conditions.

To deal adequately with maladjusted children requires not only a sympathetic understanding on the part of the teacher but also an awareness of the differences in their capacities. The teacher's training should also include a knowledge of child psychology and mental hygiene, which will be an additional asset in bringing about adjustment of the pupils.

After a complete understanding of a child is obtained, teachers and counselors need to capitalize on whatever abilities and interests are displayed. Interests should be broadened, and talents which manifest themselves should be developed. This aim requires not only adequate training on the part of teachers but also an enriched and flexible school program and, in turn, a sufficient supply of equipment and material to meet the needs of children at varying levels of ability.

SELECTED REFERENCES ON PUBLIC-SCHOOL ADMINISTRATION. I

WILLIAM C. REAVIS AND NELSON B. HENRY
University of Chicago

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THE following references on public-school administration were published between November 1, 1937, and October 31, 1938. The references were selected on the basis of comprehensiveness of treatment, practical value of the contribution, current interest in the problems considered, and factual support of conclusions. The list is necessarily restricted by limitations of space.

The references are classified under eight phases of administration: (1) general administration, (2) state school administration, (3) city school administration, (4) supervision, (5) teaching staff, (6) school finance, (7) business management, and (8) public relations. References under the first four classifications are included in this issue; references under the remaining four will be presented in the February number of this journal.

GENERAL ADMINISTRATION[1]

1. BROOKS, T. D. "Adequacy of an Educational Program," *Texas Outlook*, XXII (February, 1938), 9–10.

   "The public has a right to demand of its school administrative agencies: (1) instruction rightly directed and effectively given (2) to a maximum part of the population in need of such service (3) under conditions conducive to physical well-being and (4) at a reasonable cost."

2. CHAMBERLAIN, LEO M. *The Teacher and School Organization*. New York: Prentice-Hall, Inc., 1938. Pp. xxviii+656.

   Describes the scope and the general character of the American public-school system—its organization and the administrative units and agencies through which it is managed.

3. CHAMBERS, M. M. (Editor). *The Sixth Yearbook of School Law, 1938*. Washington: American Council on Education, 1938. Pp. viii+150.

   A narrative, topical summary of decisions of the higher courts in all states of the United States in cases involving school law, as reported during the preceding year.

[1] See also Item 441 in the list of selected references appearing in the September, 1938, number of the *School Review*.

4. COOKE, DENNIS H., HAMON, RAY L., and PROCTOR, ARTHUR M. *Principles of School Administration.* Minneapolis, Minnesota: Educational Publishers, Inc., 1938. Pp. viii+536.

Written so that an administrator or a teacher of limited training or experience can find his place in the administrative picture and understand problems in school administration.

5. DIX, LESTER. "Administration Faces New Problems," *Progressive Education*, XIV (November, 1937), 513–19.

Discusses five areas of administrative difficulty which the teacher meets in progressive education.

6. EDUCATIONAL POLICIES COMMISSION. *The Structure and Administration of Education in American Democracy.* Washington: Educational Policies Commission of the National Education Association and the American Association of School Administrators, 1938. Pp. 128.

The commission again points out that public education is the foundation upon which democracy is built, asks that the profession address itself to the reforms of the educational structure, and indicates the relationships that the school must bear to the church and the state.

7. EGINTON, DANIEL P. "Criteria for Making Educational Changes," *American School Board Journal*, XCVI (March, 1938), 19–21.

Cites nine considerations which need to be recognized in carrying out policies or programs involving change in a democratic school system.

8. FORD, FREDERICK ARTHUR. *The Instructional Program.* New York: Prentice-Hall, Inc., 1938. Pp. xvi+458.

The author brings together into a unified whole some of the latest and best theories and practices in the fields of educational administration, supervision, psychology, philosophy, classroom procedure, and mental hygiene.

9. HUNSICKER, LILIAN. "Is Educational Research Worth While?" *American School Board Journal*, XCVII (September, 1938), 41–43, 87.

A good general discussion of the value of research in determining procedures in instruction and administration.

10. MORT, PAUL R., and CORNELL, FRANCIS G. *Adaptability of Public School Systems.* New York: Teachers College, Columbia University, 1938. Pp. xii+146.

Defines the adaptation process as the process by which a school system sloughs off outmoded purposes and practices and takes on new ones to meet new needs.

11. SEYFERT, WARREN C. *School Size and School Efficiency.* Harvard Bulletins in Education, No. 19. Cambridge, Massachusetts: Harvard University Press, 1937. Pp. xiv+316.

Data gathered by the staff preparing Monograph Number 5 of the National Survey of Secondary Education (*The Reorganization of Secondary Education*) were analyzed by categorizing practices in terms of the effect that enrolments have on the use of the practices.

12. STUART, BYRON D. "School Enrolment Trends, Their Causes and Implications," *American School Board Journal*, XCVI (March, 1938), 22–24.

Decreases in elementary-school enrolments during the last seven years are already becoming evident in the high school. These changes in the direction of a static school population will mean, according to the author, the opportunity for extending services now only partially available even to the most favored schools.

13. WRIGHT, FRANK L. "Development of Democratic Living through Co-operative Administration," *American School Board Journal*, XCVI (June, 1938), 17–19, 93.

Asserts that, if democracy is to be taught effectively in the schools, administrators must practice it. Lists the qualifications and the duties of administrators and board members and suggests methods of co-operating within the school system.

STATE SCHOOL ADMINISTRATION[1]

14. AXTELL, PAUL H. "The Power To Create and Alter School Districts," *American School Board Journal*, XCV (November, 1937), 23–24; XCVI (February, 1938), 20–21; (April, 1938), 21–22; (June, 1938), 23–24.

A statement of principles which govern this power under the headings: "Its Source and Limitations," "The Power in the State and Its Exercise by the Legislature," "Delegation of Power by the Legislature and Its Exercise by the Agent," and "Discretionary Power To Create and Alter School Districts."

15. BURSCH, CHARLES. *Survey of Schoolhousing Adequacy in California Elementary School Districts Not Administered by City Superintendents of Schools*. State Department of Education Bulletin No. 5. Sacramento, California: State Department of Education, 1938. Pp. x+40.

Deals with buildings, sites, lighting, heating, sanitation, costs, and bonding capacities of school districts.

16. CHAMBERS, M. M. "New Laws on State Education," *Nation's Schools*, XX (November, 1937), 27–28.

A summary of school legislative advances in 1937.

17. DAVIS, DONALD P. "Bonded Indebtedness of School Districts in Pennsylvania," *American School Board Journal*, XCV (November, 1937), 33–35.

Reports current practices which result in unwarranted costs and suggests remedial legislation to improve this condition.

18. DIETRICH, E. N., and HOLY, T. C. "Changes in School Districts and Schools in Ohio," *American School Board Journal*, XCVI (February, 1938), 39–41, 87.

Discusses changes made under financial and school-reorganization provisions of the School Foundation Program Act of 1935.

[1] See also Item 496 (Riddle) in the list of selected references appearing in the October, 1938, number of the *School Review*.

19. FOWLKES, JOHN GUY, and BEERY, GEORGE S. *A Study of the Transportation of High School Pupils in Wisconsin, 1937–1938.* Madison, Wisconsin: State Department of Public Instruction, 1938. Pp. xii+84.

A survey of the existing practices in Wisconsin, which has for its major objective the formulation of a code for the transportation of high-school pupils.

20. GOODIER, FLOYD T., and MILLER, WILLIAM A. *Administration of Town and Village Schools.* St. Louis, Missouri: Webster Publishing Co., 1938. Pp. xiv+336.

A comprehensive treatment of the major problems of administration encountered in the organization, the management, and the supervision of schools in villages and towns.

21. HICKER, H. D. *Teacher Personnel and Enrolments in Special Schools and Classes for Exceptional Children in California Public Schools.* State Department of Education Bulletin No. 6. Sacramento, California: State Department of Education, 1938. Pp. viii+22.

A study of the current status of special education in the state, with particular reference to teacher personnel and pupil enrolment.

22. HYDE, RICHARD E. "Constitutional Limitation of Taxes and Increased School Income in West Virginia," *American School Board Journal,* XCV (November, 1937), 56.

Discusses measures which have been taken to increase school income in West Virginia.

23. LAMBERT, ASAEL C. *School Transportation.* Stanford University, California: Stanford University Press, 1938. Pp. xiv+124.

A discussion of the factors involved in providing transportation for pupils. Based on the author's experience in Utah.

24. LAWRENCE, BERTRAM ISAAC. "Some Fundamental Considerations concerning Reorganizing School Units in Missouri," *School and Community,* XXIII (November, 1937), 341–43.

Reports conclusions and recommendations of a study of school units in Missouri.

25. NORTHWAY, RUTH M. "A Challenge to the Rural School Administrator," *American School Board Journal,* XCV (December, 1937), 30–31.

Shows how progressive superintendents are widening the scope of their influence as rural-school administrators.

26. WEBER, O. F. *The Problem of School Organization and Finance in Illinois.* University of Illinois Bulletin, Vol. XXXVI, No. 15. Urbana, Illinois: University of Illinois, 1938. Pp. 174.

This study deals (1) with the development and the status of school organization and finance in Illinois and (2) with some of the conditions responsible in part for inequalities in educational opportunity.

27. WILLIAMS, R. C. *Cost of Pupil Transportation in Consolidated Schools of Iowa.* Research Bulletin No. 22. Des Moines, Iowa: State Department of Public Instruction, 1938. Pp. 32.

An investigation into the organization and the cost of pupil transportation in 323 consolidated school districts in Iowa.

28. WITHAM, ERNEST C. "Types of State School Administration," *American School Board Journal*, XCVI (March, 1938), 29–30, 92; (May, 1938), 46, 107; XCVII (July, 1938), 21–22, 87.

A summary of the organization and the important features of educational administration in the western states of the North Central area, namely, Iowa, Kansas, Minnesota, Missouri, Nebraska, and North and South Dakota.

29. WOELLNER, ROBERT C. "The Authority To Issue Teachers' Certificates in the United States," *Elementary School Journal*, XXXVIII (June, 1938), 751–58.

The results of a recent investigation of the state organizations authorized to issue teachers' certificates are reported and compared with the results of previous investigations.

CITY SCHOOL ADMINISTRATION[1]

30. BOLMEIER, E. C. "The Selection of City Boards of Education," *American School Board Journal*, XCVI (May, 1938), 41–43; "Municipal Participation in City School Finance," ———, XCVII (August, 1938), 42–44; "Municipal Participation in the Control of City School Property," ———, (September, 1938), 47–49.

A series of articles summarizing the provisions of statutes and city charters with respect to municipal control of certain aspects of the school organization in cities with populations of fifty thousand or more.

31. CAMPBELL, HAROLD G. "America's Largest City School System," *Journal of the National Education Association*, XXVII (September, 1938), 178.

The superintendent discusses the magnitude of the problem of administering one and one-fourth million pupils in a plant representing a capital outlay of one-half billion dollars.

32. DEWEY, H. E. "School Administration in Chicago": "1890 to 1924," *American School Board Journal*, XCVI (February, 1938), 42–44, 88; "1924 to 1936," ———, (May, 1938), 47–48, 101–2, 104; "The Evolution of School Administration in Chicago," ———, XCVII (July, 1938), 31–32, 92.

A narrative account of the turbulent history of the Chicago school system, with numerous references to the many and varied forces which have influenced it.

[1] See also Item 552 (Reavis, Bolmeier, and Stumpf) in the list of selected references appearing in the November, 1937, number and Item 452 (Flory and Webb) in the September, 1938, number of the *School Review*.

33. DOYLE, MRS. HENRY GRATTAN. "The Work of the Board of Education," *American School Board Journal*, XCVII (September, 1938), 19–21.

The president of the Board of Education of Washington, D.C., discusses the responsibilities of the school board.

34. DUNCAN, REID H. "Modern Schools Need Accumulative Records," *Virginia Journal of Education*, XXXI (January, 1938), 178–79.

Describes the record system in use in the Roanoke public schools, providing a cumulative record of each pupil's school career.

35. FEIK, ROY W. "The Policy of Prolonging the Life of Textbooks," *Elementary School Journal*, XXXVIII (February, 1938), 429–35.

A discussion of the educational implications of procedures employed to prolong the life of textbooks.

36. FORD, WILLARD S. "Selection, Classification, and Promotion of School Principals," *American School Board Journal*, XCV (December, 1937), 17–18, 80.

An analysis of the procedures employed in the Los Angeles city schools for the selection, the classification, and the promotion of school principals.

37. GOODYKOONTZ, BESS, and LANE, JESSIE A. *The Elementary School Principalship*. United States Office of Education Bulletin No. 8, 1938. Pp. vi+44.

Reports investigations on aspects of the elementary-school principalship in city school systems and the training opportunities available for elementary-school principals.

38. HENRY, NELSON B., and KERWIN, JEROME G. *Schools and City Government*. Chicago: University of Chicago Press, 1938. Pp. xii+104.

Report of an inquiry concerning the existing relations between schools and civil government in American cities. Includes examples of effective co-ordination of services of schools and other municipal departments and a discussion of the controversial issue of municipal control over school affairs.

39. LANE, ROBERT HILL, with GERTRUDE M. ALLISON, ETHELYN BISHOP, and DOROTHY JOHNS MCNARY. *The Progressive Elementary School*. Boston: Houghton Mifflin Co., 1938. Pp. x+198+xii.

A number of problems are discussed and solutions are suggested in the light of best present practice in "progressive" elementary schools.

40. MOSELEY, NICHOLAS. "Politics in City School Administration," *Elementary School Journal*, XXXIX (September, 1938), 36–45.

Asserts that political interference in school administration is due to the failure of our system of education and to the lack of acceptance of responsibility by professional educators and educated laymen.

41. MULFORD, HERBERT B. "By-laws for Boards of Education," *American School Board Journal*, XCVII (August, 1938), 25–26.

The author cites several reasons for the use of by-laws by boards of education and suggests an outline for the contents of a set of by-laws.

42. REAVIS, WILLIAM C. (Compiler and Editor). *Critical Issues in Educational Administration.* Proceedings of the Seventh Annual Conference for Administrative Officers of Public and Private Schools, Vol. I. Chicago: University of Chicago Press, 1938. Pp. viii+192.

Considers critical issues in five phases of educational administration: (1) the bearing of social and economic change on public-school administration, (2) maintenance of proper balance between general and vocational education in urban school systems, (3) provisions for effective guidance under present conditions in elementary and secondary schools, (4) development of effective types of in-service training for teachers in urban school systems, and (5) methods of meeting the problem of political interference in city school administration.

43. REAVIS, WILLIAM C. "The Responsibility of the City Superintendent for the School Curriculum," *Elementary School Journal*, XXXVIII (April, 1938), 577–86.

Classifies the superintendent's contributions to the curriculum as (1) curriculum interpretation, (2) modification of curriculum to local needs, (3) curriculum enrichment, (4) vitalization of curriculum materials, (5) organization of staff for curriculum production, and (6) continuous curriculum appraisal.

44. REAVIS, WILLIAM C. "The Administrative Status of the School Principal in Large Cities," *Educational Record*, XIX (October, 1938), 433–48.

Summarizes a study of the relations between the school principal and the central administrative office in eighteen large cities of the United States and Canada.

45. REAVIS, WILLIAM C., PIERCE, PAUL R., and STULLKEN, EDWARD H. *The Elementary School.* Chicago: University of Chicago Press, 1938 (revised). Pp. x+608.

A revised and enlarged edition of a standard textbook on school administration. The authors have drawn generously from the findings of recent investigations and have provided a valuable list of references.

46. RELLER, THEODORE LEE. "One Hundred Years of the City Superintendency—Next Steps," *American School Board Journal*, XCVI (February, 1938), 27–30.

Foresees necessary advancement along lines of (1) more democracy in administration, (2) recognition of problems of child life during preschool period, (3) relating the school to the community, (4) assisting young persons in life until satisfactory adjustments are made, (5) accepting responsibility for leadership in adult education, and (6) furnishing community leadership.

47. SCHULTZ, JOSEPH LEMART. *An Analysis of Present Practices in City Attendance Work.* Philadelphia: University of Pennsylvania, 1938. Pp. xii+188.

An investigation into the nature of the administrative features, types of personnel, and typical procedures of the attendance department in certain city school systems.

48. SEARS, JESSE B. *City School Administrative Controls.* New York: McGraw-Hill Book Co., Inc., 1938. Pp. xviii+282.

An analysis of the nature, placement, and flow of authority and responsibility in the management of a city school system.

49. WATERHOUSE, RALPH H. *Training Elementary-School Principals.* Publication No. 39. Akron, Ohio: Akron Board of Education, 1938. Pp. viii+82.

A questionnaire study of in-service training for the elementary-school principalship in ninety cities of the United States.

50. WHEAT, LEONARD B. "The Flexible Progress Group System," *Elementary School Journal,* XXXVIII (November, 1937), 175–83.

Describes a plan of flexible classification which abolishes repetition and the skipping of grades and allows each child to work at the grade level that fits his educational foundation and mental maturity.

51. WILSON, CLARA O., and GILLETT, NORMA. "Large Classes, or Small, in the Elementary School?" *American School Board Journal,* XCVI (May, 1938), 25–26.

The authors defend the small class for elementary schools on the basis of the findings of recent investigations.

52. WITSKY, JONAS. "The Organization and Functions of City School Research Bureaus," *American School Board Journal,* XCVI (April, 1938), 25–27, 89.

A study of the growth, the status, and the trends of activities of research bureaus in city school systems.

SUPERVISION[1]

53. CONNELL, JOHN T. "Effect of the Tenure Law upon Supervision of the County Superintendent," *Pennsylvania School Journal,* LXXXVI (November, 1937), 75–76.

A discussion of supervision in a state in which permanent tenure for teachers has become a fact. Suggests that ambition, intelligence, and initiative are greater motivating factors in the teacher than fear of dismissal.

54. LEWIS, D. L. "Administrative and Supervisory Duties of Elementary Principals," *American School Board Journal,* XCVII (October, 1938), 21–22, 87.

Occupying a strategic position of leadership, the principal must possess certain personality traits; adequate training and experience; and ability to organize, administer, and supervise.

55. MISNER, PAUL J. "Making Supervision Democratic," *Childhood Education,* XIV (November, 1937), 99–100.

The author points out that democratic supervision will make possible the participation of teachers in all phases of administration and organization.

[1] See also Items 54 (Briggs) and 63 (Reeder) in the list of selected references appearing in the January, 1939, number of the *School Review.*

56. MYERS, ALONZO F., KIFER, LOUISE M., MERRY, RUTH C., and FOLEY, FRANCES. *Co-operative Supervision in the Public Schools.* New York: Prentice-Hall, Inc., 1938. Pp. xviii+340.

A discussion of the qualifications, the induction, the guidance, and the professional growth of the teaching staff. The subjects of art, music, and physical education are treated in detail.

57. ROSE, CLAYTON EARL. "Purposeful Supervision in Small Schools," *American School Board Journal*, XCVII (September, 1938), 18, 87.

Supervision is characterized as leadership. Steps in the management of supervision and a program of constructive supervision are discussed.

58. SAYLOR, GALEN. "The Superintendent's Part in the Success of the New Teacher," *American School Board Journal*, XCVII (August, 1938), 17–19.

Suggests a number of procedures and techniques for inducting new teachers into service.

59. SMITH, SAMUEL, and SPEER, ROBERT K. *Supervision in the Elementary School.* New York: Cordon Co., 1938. Pp. 460.

A consideration of fundamental principles and procedures as applied to specific practices in supervision. A wealth of experimental background is evident.

60. *Ways to Better High Schools: The Place of Testing in the Supervisory Program.* University of Illinois Bulletin, Vol. XXXV, No. 89. Urbana, Illinois: High School Visitor, University of Illinois, 1938. Pp. 34.

The use of an adequate testing program in the local situation is a profitable and an objective way to begin a supervisory program. The bulletin discusses the application of testing to the supervisory program.

61. WEBER, SAMUEL EDWIN. *Co-operative Administration and Supervision of the Teaching Personnel.* New York: Thomas Nelson's Sons, 1937. Pp. 384.

The members of the teaching staff are envisioned as having academic and professional equipment and as imbued with a true professional spirit. The treatment covers teaching as a profession, preparation of teachers, certification and salaries, teaching personnel, and co-operative school supervision.

Educational Writings

*

REVIEWS AND BOOK NOTES

ADAPTABILITY, THE NEGLECTED CRITERION OF SCHOOL ADMINISTRATION.—For the first time an entire book[1] has been devoted to a consideration of the changes which take place in schools in response to the needs that arise in the society served by the schools. "Change," however, is not the word; a new term, "adaptation," is to be added to the vocabulary of the educationist. The word is suggestive of Darwin and Huxley and may mark the rebirth of educational administration as a real science. "*The adaptation process* is the process by which a school system sloughs off outmoded purposes and practices and takes on new ones to meet new needs. *Adaptability* is the capacity for adaptation" (p. ix).

The book deals mainly with an appraisal of the mechanisms for eliminating or for replacing obsolete practices and for dealing with emergent personal or civic needs as revealed by scientific study. It also discusses the factors which condition adaptability, such as density of population, age distribution of the population, rate of population growth, attitude toward local self-government, and wealth. The earmarks of adaptability in the four provinces of the Union of South Africa and four states in the vicinity of New York City are identified by a guide containing statements of what are believed to be the needed adaptations. The question of which type of control and support, local or central, is conducive to the greatest amount of adaptability is discussed, but no answer is given. The various hypotheses in the claim for local initiative are presented, and investigations of the current status of support and control are proposed.

The study is a concentration on the relation of the institution, the school system, to the needs of the individuals whom it serves and of the society which gives it support. The study is necessarily limited in the area in which it makes its investigations, very little mention being made of territory west of the Alleghenies or of educational writers who have ably depicted the changes in the American schools to meet social needs, without the use of such technical phraseology as "the invention, introduction, and diffusion of adaptations." It is probable that this study will be followed by others which will break down these limitations and give to the profession an impetus and a technique for analyzing the school in terms of its adaptability.

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[1] Paul R. Mort and Francis G. Cornell, *Adaptability of Public School Systems*. New York: Teachers College, Columbia University, 1938. Pp. xii+146. $2.10.

THE COMMUNITY APPROACH TO EDUCATION.—The chapters of *The Community School*[1] finally make it possible for even the unimaginative person to understand what a socialized program of education might mean in any given community. The reader is struck, on the one hand, by the similarity of the philosophy of the schools described and, on the other, by the variety of techniques employed. Another observation which forces itself on the reader is a recognition of the practical creativity of the directors and the teachers in the schools represented. They have defied the traditions of formal education and have lifted themselves by their own bootstraps. Reality, participation, cultural integrity, and respect for individualism are apparent throughout.

Kilpatrick, in an introductory chapter on learning, sums up the situation as follows: "The unit instance of the complete educative process is thus the co-operative community enterprise. In this, properly conceived, lies all worthy living. From this, properly conducted, will flow directly or indirectly all needed education" (p. 22).

Those who consider the formal curriculum as futile and those who distrust mechanical collectivism will find in this book an implicit theory for democracy, for education, and for community living. The list of schools represented provides one with a good guide for a visitation itinerary.

The body of this co-operative volume consists of ten chapters dealing with the philosophy and the practices of community schools. These accounts are highly complimentary to the administration and to the teaching in the situations described. The community schools are located in New York City; in Waialua, Hawaii; in Chicago and Glencoe, Illinois; in Summerfield, Tennessee; in the rural areas of Michigan and Louisiana; and among a tribe of American Indians. The general chapter on techniques by Draper and the bibliography by Wattenberg provide useful supplementary materials for those interested in pursuing the general subject further.

The final chapter, "An Analysis of the Programs," by Everett, is a splendid statement of significant issues in education, which assembles the many justifications for community-connected education. The following statement provides an insistent basis for curriculum study: "The community approach to education requires fundamental revision of current academic thinking and practices. It is necessary that we revise our thinking on educational philosophy and the learning process. It is requisite that we make repeated studies of the American social scene, of the problems of regional areas, and of local communities" (p. 461). The fact that the community-school developments described—according to the accounts—all take the same side of the argument in nine significant issues of education discussed in this chapter indicates to the reviewer that the com-

[1] *The Community School.* Edited by Samuel Everett. Society for Curriculum Study, Committee on the Community School. New York: D. Appleton-Century Co., Inc., 1938. Pp. xii+488. $2.25.

munity-school concept defines a definite position and philosophy for American education.

This book should appeal both to the novice and to the educator who is concerned with program-building in a practical way.

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IMPROVING THE TEACHING OF ARITHMETIC.—The literature of arithmetic contains few comprehensive treatments of the psychology and methodology of this subject. Professor Wheat's publication in this field[1] is the most systematic and penetrating account of the psychology of arithmetic and of the implications for teaching which has yet appeared.

As usual, Professor Wheat is particularly explicit in stating his point of view. Two quotations from the Preface set forth his position clearly:

> There appears to exist among teachers of arithmetic in the schools and among writers upon the teaching of arithmetic the belief that number is to be found in the world of things and of experiences and of practical affairs, and that all one needs to do to lead children to the discovery of number is to bring them into contact with objects and experiences and situations.
>
> Although number may be applied to everything in the world, it exists nowhere in the world. The world does not of itself possess number; the world has been invaded by trained minds which have been equipped with number. Objects in the world do not make themselves countable; the child counts the objects which surround him only when he has learned to count. Playing store does not project addition to be beheld and studied; the child keeps accounts only when he has learned to add. Business practices do not of themselves portray percentage; the idea of percentage is brought to business practices to make them meaningful [p. iii].

As a foundation for his treatment the author devotes the first six chapters of his book to the origin and the development of our number system. His treatment is, in no sense, a dry, historical statement of facts; rather it is an attempt to give understanding of a number system frequently treated all too lightly by teachers who do not know the psychology of the development of the system. These chapters supply a rich background which will suggest to a teacher many possibilities for utilizing, in the motivation of arithmetic, the inherent characteristics of the number system, as well as the usual and often threadbare applications to certain social situations.

Beginning with chapter vii, Professor Wheat turns from the development of the number system to a consideration of the present attitude toward the subject in the light of various practices which have characterized the teaching of arithmetic in American schools. His account of the shift of emphasis from period

[1] Harry Grove Wheat, *The Psychology and Teaching of Arithmetic*. Boston: D. C. Heath & Co., 1937. Pp. x+592. $2.80.

to period makes much clearer the present point of view regarding the teaching of arithmetic. This type of discussion gives the teacher a perspective of the subject which is often badly needed to offset extreme enthusiasms for a single point of view.

In the remaining chapters of the book the author develops the implications of psychology for the teaching of arithmetic. His use of the idea of ten is extended beyond his earlier valuable treatment of this topic. The chapters are replete with practical suggestions for the teacher.

As a comprehensive treatment of the number system and the mathematical aspects of arithmetic, the book is, in the opinion of the reviewer, the most useful volume which has appeared. It may be criticized by some for giving less emphasis than have some other books to the social aspects of arithmetic. The author shows no hostility to the social point of view but, perhaps for lack of space, builds his major emphasis around the number system. In view of the fact that in recent years social applications and activities have been treated so widely elsewhere, the book serves a more useful purpose because it does deal with those fundamental mathematical aspects of arithmetic which may easily be slighted by teachers possessing a great enthusiasm for social applications. Teachers will find the book both helpful and interesting.

G. T. BUSWELL

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OBJECTIVE EVALUATION OF THE EFFECT OF MANUSCRIPT WRITING ON SPELLING GAIN.—Although manuscript writing was introduced into the United States during the early part of the twentieth century, the present wide interest in it probably dates only to 1922, when Marjorie Wise, an English woman, used the method at Horace Mann School and instructed a group of teachers in the technique. By 1936 approximately 1,161 schools were teaching this form of writing, at least in the primary grades, and at the present time the use of this writing appears to be spreading rapidly. The reason for the popularity of the method is not entirely clear. Many claims have been made for it, but objective evidence supporting these claims is, for the most part, wanting.

With keen appreciation of the need for experimental investigation, Jonathan Varty has conducted a study[1] to determine the effect of manuscript writing on achievement in spelling. Seventeen hundred and twenty-seven pupils in Grades II and III of the New York City public schools took one or more objective tests of intelligence, reading, and spelling. Control groups used cursive writing; experimental groups used manuscript writing. The experimental technique employed both matched-group and person-to-person pairing procedures. Spelling improvement was computed by determining the differences between initial spell-

[1] Jonathan W. Varty, *Manuscript Writing and Spelling Achievement: With Special Reference to the Second and Third Grades.* Teachers College Contributions to Education, No. 749. New York: Teachers College, Columbia University, 1938. Pp. 64. $1.60.

ing scores and spelling scores one semester later. The spelling tests included taught words, untaught words, and equated word series.

Group-to-group matching failed to yield statistically significant differences in spelling. In the person-to-person pairing two differences appeared statistically reliable but failed in their agreement with other data. Insofar as the study is indicative, manuscript writing appears to be of no more assistance to spelling than is cursive writing.

The author planned and conducted the investigation with nice regard for the principles of control-group procedure, and he has, for the most part, reported his study well. The Introduction sketches the historical background succinctly and makes an excellent statement of the value of scientific study in planning educational programs. The final section on the need for additional research is equally well written.

Portions of the report discussing the actual experiment and the findings are at times puzzling to the reader. For example, it is stated that final tests in reading and spelling were administered, but the use of the final reading tests is not made clear. Also, the initial description of subjects states, "There was a total of 448 experimental cases" (p. 11), but later it is stated that "there were 464 subjects in the experimental group" (p. 22). In the section dealing with conclusions the separation of the first sentence from the last paragraph on page 38 would have made for greater clarity; as it stands the reader faces an apparent contradiction: "Two statistically reliable differences were found. . . . . These gains, however, are not statistically reliable."

The major weakness of the study would appear to lie in its failure to consider the technique or the techniques used in teaching spelling. No doubt this factor was dismissed as an irrelevant variable; the dismissal does not appear justified. The reader is left in doubt whether all groups learned spelling by the same or by different methods. Since they were a part of the same metropolitan system, it may be inferred that a common general procedure obtained, with certain variations depending on pupil personnel and teacher preferences. There is no statement, however, to this effect. Conceivably the mode of writing might exert slight influence over a visual-oral approach to spelling but might exert profound influence over a highly kinesthetic method of approach. Furthermore, the failure to achieve reliable differences might result from unintentional balancing of spelling methods from group to group rather than from the similarity of influences of cursive and manuscript writing.

The author's identification of his problem, his objective attack, his reserve in refraining from unwarranted generalizations, and his specific recommendations for further research, in themselves, constitute contributions to education. It is to be hoped that Varty will conduct additional investigations in this field.

L. C. Gilbert

University of California

MENTAL HYGIENE A LA PROGRESSIVE EDUCATION.—To those who know Ryan's philosophy of education and to those who are familiar with the successive developments in the field of "progressive" education, this volume[1] will come as no surprise. It includes criticisms of several features in our modern formulative education setup, including teacher-training institutions. Characteristic of these criticisms is the following paragraph.

> This deficiency on the human side of teaching is characteristic of the summer sessions throughout the country. At the 1936 summer school of the University of Oregon (when the National Education Association was meeting on the coast and there was every inducement for attracting visitors), the courses for teachers included an array of psychology courses—ten of them—but little that was offered under the psychology label seemed to bear in any direct way upon normal human living, emotional life, or wholesome personality [p. 77].

The emphasis throughout the book is on personality development and mental hygiene. Ryan furthermore advances a specific program which is quoted herewith:

> 1. A re-facing of the educational task by school leaders and the general public, whereby education will endeavor to meet more fundamental human needs than those ordinarily dealt with in the conventional school.
>
> 2. Insistence upon a better "emotional climate" for schools, with more appropriate school buildings, more wholesome classroom situations, and a more satisfying teacher-child relationship.
>
> 3. A radical change in the methods of selection and preparation of teachers and administrators that will make teacher education more like the training of social workers, with emphasis on cultural resourcefulness, understanding of the sciences underlying behavior, and direct contacts with children.
>
> 4. Provision of an enriched and flexible school curriculum, to be determined in each case by the needs and interests of individual human beings and the group, and giving major attention to the arts and other creative activities rather than to traditional subject matter.
>
> 5. A new type of school administration, with a mental-hygiene viewpoint, that emphasizes optimum growth and development of human beings rather than the mechanics of control, as at present.
>
> 6. Extension, as rapidly as possible, of the service of the visiting teacher or a similarly qualified worker to all communities, and the establishment of sufficient child-guidance clinics or similar facilities to meet the needs of all children.
>
> 7. A closer rapprochement of the family and the school in mental-hygiene activities, and extension of the nursery school to reach all the families in the community.
>
> 8. Active collaboration by the school with community forces working for mental health [pp. 284–85].

There are those who will say the book is unscientific since it makes scant mention of experimental investigations and the like. The reviewer feels that the

[1] W. Carson Ryan, *Mental Health through Education.* New York: Commonwealth Fund, 1937. Pp. viii+316. $1.50.

author was well advised of this criticism in advance. In fact, in his Preface he says specifically:

> No claim for scientific profundity is made in these pages. A sincere attempt has been made to achieve such accuracy as present knowledge will permit, and to indicate what appears to be the consensus of sound judgment in a field where there is a lack of the objective data familiar to the physical scientist and where there are wide divergencies in point of view among persons of recognized authority [p. viii].

On the whole, the book presents a sound, constructive point of view. There is no doubt that many of the criticisms of existing practices are well founded. That the methodological answers are not always forthcoming is no more a criticism of this volume than of any other in print today. Ryan's book is sufficiently challenging to be of value to every teacher, and at least one copy of it should be in every school.

FRANCIS F. POWERS

University of Washington

THE MOST EFFICIENT WAYS FOR PEOPLE TO LIVE AND WORK IN AN INTERDEPENDENT WORLD.—The heading of this review is the theme of a recently published geography textbook[1] for Grade VII or VIII which incorporates the objectives of geography-teaching embodied in the Thirty-second Yearbook of the National Society for the Study of Education and which includes many features designed to facilitate instruction.

The United States at Work is divided into six units: (1) "Our Surroundings Help To Make Us What We Are" (89 pages); (2) "A Workshop Develops in the East" (140 pages); (3) "The South Revalues Its Assets" (107 pages); (4) "The Middle West Is an Evenly Balanced Region" (122 pages); (5) "The West Is a Land of Contrasts" (120 pages); and (6) "The United States Seeks Prosperity for Its People" (68 pages). Each unit, in turn, is organized into two or three problems, those for the first unit being: "How did our industrial civilization begin?" and "How has the geographic environment affected American industry?"

For each problem the textbook provides a short approach, a number of questions to be answered if the pupils are to solve the problem, a list of suggested "things to do," and a short bibliography. The *Teacher's Manual* gives helpful suggestions on time allotment, objectives, approach, procedures, and the specific concepts and principles to be developed.

The authors have developed a readable book of unusual attractiveness. The paper is of good quality; the type is clear; and the more than three hundred illustrations, graphs, and maps are effectively grouped for teaching purposes. Great care has been taken to secure pertinent illustrations, and these are made

[1] Maude Cottingham Martin and Clyde Edwards Cooper, *The United States at Work*, pp. xiv+654, $1.96; *Teacher's Manual for "The United States at Work,"* pp. ii+38, $0.16. Boston: D. C. Heath & Co., 1938.

an integral part of the text through statements and questions in the legends, as well as through direct references in the content itself.

For the most part the authors have been successful in presenting simply the many difficult concepts involved in a treatment of the economic development of the United States. A careful reading of the book on the part of the reviewer raised comparatively few questions of interpretation. Did a pre-Revolution New England trader "very often . . . . set forth from his home with fish for the West Indies, rum for Africa, and timber for England" (p. 108)? Was it only the establishment of factories in New England that made cotton-growing in the ante bellum South profitable (p. 232)? Does the use of farm machinery add to the cost of production of farm crops in this country (p. 396)? Should not a treatment of the "Importance of Foreign Trade" (p. 587) include a clear-cut statement to the effect that exports tend to balance necessary imports?

There are a few slips which should be corrected in a second edition. Thomas "Newcomer" (p. 18) should read "Newcomen." The Chicago "Loop" is much less than "the area between the river [Chicago] and the lake" (p. 434).

HOWARD R. ANDERSON

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OLD FOLK TALES IN NEW FORM.—Recent analyses of the contents of primary-grade readers have shown a large increase in the proportion of realistic and informational selections included and a corresponding decrease in the percentage of imaginative stories. Undoubtedly the trend toward informational material has been stimulated, in part, by the "activity movement." For, with the development of programs emphasizing play and constructive activities relating to such topics as the fireman, the postman, and the grocer, teachers in the primary grades have felt the need of related information for reading. The relegation of fanciful literature to an unimportant place has, however, been deplored by many educators, who claim that all children have a right to knowledge of the traditional legends and that imaginative material has special values in developing an appreciation of literature and in stimulating a love for reading. It has been urged that these values should be retained.

A timely group of literature readers[1] for Grades I, II, and III have appeared in the form of supplements to the Alice and Jerry Series. The readers consist entirely of well-known folk tales retold in simple language. They include accumulative stories, such as "The Gingerbread Boy" and "The Straw Ox"; comic folk tales, such as "Lazy Jack" and "The Twelve Sillies"; nursery or fairy tales, such as "The Boy Who Went to the North Wind" and "East of the Sun and West of the Moon"; animal tales such as "The Three Little Pigs"; and myths

[1] Miriam Blanton Huber, Frank Seely Salisbury, and Mabel O'Donnell, The Wonder-Story Books. Reading Foundation Series. *I Know a Story*, pp. 160, $0.88; *It Happened One Day*, pp. 200, $0.92; *After the Sun Sets*, pp. 304, $0.96. Evanston, Illinois: Row, Peterson & Co., 1938.

explaining, for example, why the fox has white on the tip of his tail and why a dog will run after a cat. English, Scottish, French, German, Norse, and Russian tales are represented. No poetry is included in the books.

According to the Research Department of the Detroit Public Schools, the grade placements of the books, determined by the application of the Winnetka formula for reading difficulty, are 0.6, 1.3, and 2.1, respectively. The total number of different words in each book, as given by the publisher, is less than the average reported in recent studies of readers for the same grade. Almost three-fourths of the new words used are identical with those included in the corresponding Alice and Jerry readers. The average repetition of a word varies from 23.8 times for Book I to 44.1 for Book III. In the back of each book a helpful vocabulary chart gives the number of new words that will be met in each story. If, for instance, "The Gingerbread Boy" is read following the "Betsy Lee" unit in the Alice and Jerry Primer, the chart shows that there will be fifteen pages with no new words, four pages with one new word, and one page with two new words.

A gaily illustrated title-page precedes each story, and a decorative illustration, usually in four colors, appears on practically every page of the story. Soft and pastel shades are often used in Books II and III, in spite of the fact that scientific findings indicate that children in the primary grades prefer crude, bright colors. As a result of the irregular sizes of the illustrations, the arrangement of the reading material differs from page to page. Though the variations will probably not affect ease of reading in Grades II and III, they may confuse the young child who is just learning to read. The gay cover designs extending to the back cover will undoubtedly attract children.

The difficulty of retaining the beauty and the spirit of the original folk tales when transposed into simplified versions has been partly overcome in Books II and III. Book I, however, at times seems to present mere summaries of the original tales, probably because of the need of conforming to a short word list. However, the care taken to eliminate word difficulties should commend the books to teachers and supervisors.

The Wonder Story Books may be used advantageously in sets to supplement any basic readers with similar vocabularies. They may also prove useful for retarded pupils in the middle grades requiring easy material which they have not attempted to read before and which gives no indication of grade placement.

GERTRUDE WHIPPLE

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VISITS WITH ORIENTAL PEOPLE.—Most pupils studying geography would like to take journeys into distant lands. Denied the opportunity, they like to read vivid accounts of such journeys. Lowell Thomas and Rex Barton[1] have

[1] Lowell Thomas and Rexford W. Barton, *Wings over Asia: A Geographic Journey by Airplane*. Philadelphia: John C. Winston Co., 1937. Pp. xiv+400. $1.20.

contributed a most excellent substitute for an extended excursion in the Orient. The subjects of description are well chosen, and the word pictures are clearly drawn. The narrative is so cleverly written that each child reader puts himself at the controls with the authors, visits strange people with them, and shares with them hundreds of fascinating experiences.

Several features of the book are especially commendable: (1) In the case of each place visited, the authors discuss subjects of major importance whether or not these subjects are inherently glamorous. The readers are taken to rice fields, silk filatures, and fishing villages, as well as to pagodas and festivals. The items of chief importance in the lives of the people visited are given the principal emphasis, and explanations are included to show how the climate, the land surface, the relative location, and other environmental factors have contributed to the human developments observed. (2) Brevity is primary in importance. Material for a large volume is handled adequately in less than four hundred pages. (3) The style is simple yet pleasing. A sixth-grade pupil will read it readily, yet the average adult will gain pleasure from it. (4) Despite the "journey" method of treatment, the coverage is extensive enough to give the personality of the Orient as a whole. (5) Travel by airplane is in itself an excellent device for motivation of subject matter.

The reviewer desires to comment adversely on only three items: (1) India might well have been included. (2) The illustrations give too much emphasis to the bizarre and unusual. (3) The maps are not confined to that which they are intended to show—the routes taken—but include items not harmonious with the text. There are too many smiling whales, which, though they are larger than islands, ride the waves like eggshells.

Approximately 125 pages are devoted to Japan; 80 to Chosen, Manchukuo, Mongolia, and Tibet; 110 to China and Hong Kong; and 75 to Indo-China, Siam, and Malaya.

The book is primarily a geographical reader. It may be used to best advantage as a supplement to the regular textbook in geography. Its simplicity, excellent motivation, and quality of interest should help sharpen the geographic concepts that should be developed. It has a place in the library as a book of frequent use and "interesting reading." Containing few data, it is not a reference book nor a gazetteer.

WILLIAM J. BERRY

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WATER THROUGH THE AGES.—Man's struggle, past and present, to satisfy his needs for water is a fascinating tale. A recent book[1] contains a highly interesting narrative account of development in the use of water. Each stage of advancement and each invention is shown in its historical setting, for example, the

[1] Augustus Pigman, *A Story of Water*. New York: D. Appleton-Century Co., Inc., 1938. Pp. xii+152. $1.50.

use of dams, reservoirs, and canals in ancient Egypt; the early aqueducts in Damascus and Rome; and in modern cities the purification of water by means of filters and chemical treatment.

After a short chapter of introduction, the book has six chapters telling the relation of water to the life of the cave men; to the life of nomad herdsmen; to ancient Egypt; to the cities of the Roman Empire; to the Middle Ages; and to modern times. The author maintains a nice sense of proportion by keeping the story of man's use of water in proper relation to the general historical narrative. No dates are used although parallel historical events are noted. A complete and helpful chronology is appended, and there is an index.

The book is illustrated by line drawings. These show scenes from history, such as wells in the time of Abraham and Gothic gargoyles spouting water in medieval fountains, and also the mechanical operation of machines, such as the windmill, the water wheel, and electrically driven pumps.

Pupils in the upper elementary school and in high school, and many adults as well, should find in this book stimulating and profitable reading. In social science the book would be useful for reference in a unit of study on the development of water systems and also as a general reference on the history of civilization.

HELEN E. RICHARDSON

University Elementary School
University of Chicago

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY THEORY AND PRACTICE

ALINGTON, C. *A Plea for a Plan: The Two Types of Education.* London: Longmans, Green & Co., 1938. Pp. viii+150. $1.75.

Critical Issues in Educational Administration. Compiled and edited by William C. Reavis. Proceedings of the Seventh Annual Conference for Administrative Officers of Public and Private Schools, Vol. I. Chicago: University of Chicago Press, 1938. Pp. viii+192. $2.00.

Education for American Life: A New Program for the State of New York. The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., 1938. Pp. xviii+168. $2.00.

Education of the Handicapped: Vol. I, History. Edited by Merle E. Frampton and Hugh Grant Rowell. Yonkers-on-Hudson, New York: World Book Co., 1938. Pp. xii+260. $2.40.

HARTMAN, GERTRUDE. *Finding Wisdom: Chronicles of a School of Today.* New York: John Day Co., 1938. Pp. xvi+148. $3.00.

HYERS, FAITH HOLMES. *The Library and the Radio.* Chicago: University of Chicago Press, 1938. Pp. xii+102. $0.75.

Laboratory Techniques of Teaching: The Contribution of Research to Teachers Planning the Individualization of Instruction. By the Members of Education 335-336M, 1937–1938, with an Introduction by Thomas H. Briggs. New York: Teachers College, Columbia University, 1938. Pp. 82. $0.90.

LANGFITT, R. EMERSON. *The Daily Schedule and High-School Organization.* New York: Macmillan Co., 1938. Pp. xvi+340. $2.50.

MAYHEW, ARTHUR. *Education in the Colonial Empire.* London: Longmans, Green & Co., 1938. Pp. xii+292. $2.50.

RAMSEY, GRACE FISHER. *Educational Work in Museums of the United States: Development, Methods and Trends.* New York: H. W. Wilson Co., 1938. Pp. xiv+290. $2.50.

SMITH, B. OTHANEL. *Logical Aspects of Educational Measurement.* New York: Columbia University Press, 1938. Pp. x+182. $2.50.

SMITH, SAMUEL, and SPEER, ROBERT K. *Supervision in the Elementary School.* New York: Cordon Co., 1938. Pp. 460. $2.90.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

BAXTER, EDNA M. *Living and Working in our Country* (A Unit in Weekday Religious Education for Christian Citizenship Series for Grades Five and Six). New York: Printed for the International Committee on Co-operative Publication of Weekday Church School Curriculum by the Methodist Book Concern, 1938. Pp. 200. $1.00.

ECKERSLEY, C. E. *Essential English: A Progressive Course for Foreign Students,* Book I. London: Longmans, Green & Co., 1938. Pp. xii+244. $1.50.

EDWARDS, VIOLET. *Group Leader's Guide to Propaganda Analysis.* Revised Edition of Experimental Study Materials for Use in Junior and Senior High Schools, in College and University Classes, and in Adult Study Groups. New York: Institute for Propaganda Analysis, Inc. (130 Morningside Drive), 1938. Pp. 240+32.

GILMARTIN, JOHN G., KENTOPP, HENRY E., and DUNDON, ROSCOE E. *Problems in Junior Mathematics.* New York: Newson & Co., 1939. Pp. 192. $0.80.

GOLLOCK, G. A. *Stories of Famous Africans,* pp. 62, $0.30; *More Stories of Famous Africans,* pp. 62, $0.30. The New Method English Library. London: Longmans, Green & Co., 1937.

ISIDRO, ANTONIO; GALANG, RICARDO C.; DAGUIO, AMADOR T.; and ALCANTARA-LACSAMANA, VICENTA. *Our Country.* Nationalism Series, Book V. Manila, Philippine Islands: Insular Book Co., 1938. Pp. xii+280.

Leisure Reading for Grades Seven, Eight, and Nine: Graded and Classified. Prepared for the National Council of Teachers of English by Its Committee on Recreational Reading, Stella S. Center and Max J. Herzberg, co-chairmen. Chicago: National Council of Teachers of English, 1938. Pp. 148. $0.20.

Modern Short Stories. Selected and edited by Emma L. Reppert, with the editorial collaboration of Clarence Stratton. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xxxviii+564. $1.40.

PRATT, MARJORIE, and MEIGHEN, MARY. *Fun for You.* Chicago: Benj. H. Sanborn & Co., 1938. Pp. 46. $0.60.

SPINK, JOSETTE EUGÉNIE, and MILLIS, VIOLET. *Totor et Tristan: Deux soldats de bois.* Boston: Ginn & Co., 1938. Pp. xiv+180. $1.12.

WOODBURN, JAMES A., and HILL, HOWARD C. *Our Country: A United States History for City Boys and Girls.* Part 1, pp. viii+272+(ix–xxxiv); Part 2, pp. viii+278+(ix–xxxiv); Part 3, pp. viii+292+(ix–xxxvi). New York: Longmans, Green & Co., 1938. $1.08 each.

PUBLICATIONS IN PAMPHLET FORM

The Federal Government and Education. A Summary of Findings and Proposals of the Advisory Committee on Education. Washington: Government Printing Office, 1938. Pp. 32. $0.35.

IRWIN, FRANK L. *A Comparative Study of the College Preparation, Teaching Combinations, and Salaries of Kansas High School Teachers (1938).* Kansas State Teachers College Studies in Education Number (Fifteenth of the Series). Bulletin of Information, Vol. XVIII, No. 9. Emporia, Kansas: Kansas State Teachers College of Emporia, 1938. Pp. 38.

KOENIG, SAMUEL. *Immigrant Settlements in Connecticut: Their Growth and Characteristics.* Works Progress Administration Federal Writers' Project for the State of Connecticut. Hartford, Connecticut: State Department of Education, 1938. Pp. 68.

New Contributions of Science to the Exceptional Child. Proceedings of the Fourth Institute on the Exceptional Child under the Auspices of Child Research Clinic of the Woods Schools. Langhorne, Pennsylvania: Child Research Clinic of the Woods Schools. Pp. 62.

Occupational Trends in California with Implications for Vocational Education: V. Trends in Manufacture. State Department of Education Bulletin No. 9. Sacramento, California: State Department of Education, 1938. Pp. xvi+144.

Recent Books for Libraries in Elementary and Junior High Schools. Selected by Carolyn Howard. Millersville, Pennsylvania: State Teachers College, 1938. 25 titles.

RINSLAND, HENRY D., and MOORE, JAMES H. "The Vocabulary of Elementary School Children of the United States." Works Progress Administration of Oklahoma, Project 465-65-3-37. Norman, Oklahoma: University of Oklahoma, 1938. Pp. 46 (mimeographed).

Safety Education thru Schools. Research Bulletin of the National Education Association, Vol. XVI, No. 5. Washington: Research Division of the National Education Association, 1938. Pp. 239–98. $0.25.

Suggestions for Improving Instruction in English. Prepared by the Library-English Committee of the High School Conference. University of Illinois Bulletin, Vol. XXXV, No. 83. Urbana, Illinois: High School Visitor, University of Illinois, 1938. Pp. 48.

Tentative Course of Study in Music for Elementary and High Schools. Bulletin of the State Board of Education, Vol. XXI, No. 1. Richmond, Virginia: Virginia State Board of Education, 1938. Pp. 86.

Ways to Better High Schools: I. *A Challenge to the Secondary School* (University of Illinois Bulletin, Vol. XXXV, No. 17, 1937), pp. 18; II. *The Function of the Principal as a Supervisor in the Professional Improvement of the Instructional Staff* (University of Illinois Bulletin, Vol. XXXV, No. 66, 1938), pp. 22; III. *The Principal and Curriculum Reorganization* (University of Illinois Bulletin, Vol. XXXV, No. 67, 1938), pp. 24; V. *Library Enrichment Hints* (University of Illinois Bulletin, Vol. XXXVI, No. 18, 1938), pp. 54. A series published by the Committee on Supervision, a special committee appointed by the Curriculum Committee of the Illinois High School Principals' Association. Urbana, Illinois: University of Illinois.

UNITED STATES OFFICE OF EDUCATION PUBLICATIONS:

Bulletin No. 2, 1937—*Statistics of Special Schools and Classes for Exceptional Children: Being Chapter VI of Volume II of the "Biennial Survey of Education in the United States: 1934-36"* (advance pages) by Emery M. Foster and Elise H. Martens. Pp. iv+180. $0.20.

Bulletin No. 18, 1937—*Preparation for Elementary School Supervision* by Mary Dabney Davis. Pp. vi+76. $0.15.

Bulletin No. 31, 1937—*A Survey of Courses of Study and Other Curriculum Materials Published since 1934* by Bernice E. Leary. Pp. vi+186. $0.20.

Bulletin No. 8, 1938—*The Elementary School Principalship: Some Aspects of Its Development and Status* by Bess Goodykoontz and Jessie E. Lane. Pp. vi+44. $0.10.

MISCELLANEOUS PUBLICATIONS

WALLACK, WALTER M. *The Training of Prison Guards in the State of New York.* New York: Teachers College, Columbia University, 1938. Pp. xx+418. $2.75.

THE ELEMENTARY SCHOOL JOURNAL

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Educational News and Editorial Comment

*

Relation of Two Important Social Institutions—The Press and Education

THE school is essentially a social institution; inescapably it must operate within the ideals and purposes of the society and community of which it is a part. The successful educator is sensitive to public opinion, and he is aware of the fact that public opinion sets limits to what he can do and to the ways in which he can do it. He knows equally well that public opinion on many matters is something of a *phantom*, that it is subject to sudden shifts, to veerings now in this direction, now in that; but he also knows that it is often rooted firmly and deeply in long established traditions, that it is colored and molded by the mores of the larger society or of the smaller community. If he is wise, as well as informed, he will attempt to shape public opinion with respect to education by laying his cards on the table: he will establish a program of public relations which has for its purpose the enlightenment of the citizenry on all matters touching the schools.

The press reflects public opinion and also influences it. An analysis of the editorial columns of representative newspapers reveals much with respect to the lay attitude toward the problems of educa-

tion, and it affords to some extent a measure of the impact of one important social institution, the press, on another social institution, the school. An analysis of this kind gives the school administrator and the teacher a clearer insight into the public's attitude toward their aims, methods, and problems. It stakes off the areas of disagreement or misunderstanding between the professional educator and the layman and makes it possible for educators to offer a better interpretation of their functions to the public. When the public is better informed, it will be in a position to offer more intelligent criticism by way of charting the course that education should take.

An analysis of editorial opinion of the kind commented on in the preceding paragraph has been made by Charles R. Foster, Jr., and the results have been published in a volume entitled *Editorial Treatment of Education in the American Press*. The volume is published by the Harvard University Press as Number 21 of the Harvard Bulletins in Education. The analysis included all editorial comment on education appearing in twenty-five selected newspapers for the period 1930–35.

On the basis of the data presented in this study, it appears that American educational leadership has done a rather poor job of informing the public with respect to the problems and the needs of education. There are many gaps in the editorial treatment of important issues, and not infrequently editorial opinion has been based on erroneous assumptions. Some of the more important conclusions of Mr. Foster's investigation are quoted in the following paragraphs.

Is it favorable or unfavorable comment? One-fourth of it is classified in this analysis as "adversely critical." That is surely reasonable enough. If three out of four editorials are either favorable or neutral in attitude, it is no longer possible for school men to accuse the press of undue hostility toward them. This in no way involves the question whether the criticism itself is justified. We speak here only of the amount of it.

Educational costs share the center of editorial attention with issues relating to the purposes, value, efficiency, and personnel of the school system. But what is done in the schools or how it is done constitute matters upon which the newspapers of the United States offer the educator little counsel. Numerous questions important to the educator are almost entirely ignored. The press is mainly concerned with the general worth and necessity of the school system, the people who operate it, and the money wherewith to make it possible. . . . .

It is interesting that one out of every three comments, of those which lead

in frequency of mention, deals with the money side of the question. We may state it as an indisputable fact that the angle of public education which most often claims the editor's attention is its cost.

Turning to the equally important subject of school problems largely ignored by the press, we find such items as: specific school subjects, methods and procedures used in teaching, measurement of the outcomes of instruction, vocational education, success or failure of students, character education, vocational guidance, treatment of controversial issues in the classroom, nonpromotion and failures, tenure of teachers, special education for the handicapped, adult education.

These and other important topics receive little attention in editorial columns. There is a serious gap here in public thinking on educational matters. If, along with this absence of comment on issues important to educators, we consider that there is much lack of correct information, leading to unsound appraisal of educational affairs, we are led to the conclusion that the press is ill informed about issues of considerable significance to the public-school system. From this it follows that there is need for some method whereby the public can learn what the public school is doing or failing to do about many things. Only informed public leadership can be of much critical aid to the educator.

As has been suggested, the cost of education bears the brunt of adverse editorial criticism. Eighty per cent of all editorial references to the cost of education are unfavorable. Also leading objects of negative criticism are the boards of education. It is certainly true that questions of finance and school-board policy provide the areas wherein there is the least agreement between the critics and the criticized in the American public-school system.

A considerable proportion of the favorable criticism found in the press goes to the teaching body. But it is general comment. Specific editorial commendation of individual teachers is sadly lacking. To administrators, and especially those in higher education, go most of the laudatory sentiments which editors feel moved to express about individuals in the profession of teaching.

It is also worthy of note that in 62 per cent of the cases, editorial comment on school superintendents and administrators is favorable. These functionaries do not bear as heavy a load of antagonistic public criticism as one might imagine.

A more significant point is the fact that the total amount of editorial comment on administrators, especially public-school administrators (such as principals), gives very thin justification to the view that administrators, by their policies, are molders of the public mind. . . . .

The field of advanced education ranks high in frequency of comment. It is a point of no small importance that in some newspapers nearly two-thirds of all the editorial references to education relate to the colleges and universities. At the least it is an interesting point that the newspapers of the country devote a markedly high percentage of their editorial comments on education to the upper levels. Primary and secondary education affect directly the lives of twenty times as many people. More than one-third of the editorial comments

on education have to do with the stratosphere of the educational system, so far as the ordinary man is concerned. . . . .

Editors all too frequently fail to show any grasp of the fact that educational financing is only a part of the larger question of government financing. It can be considered effectively only in its relationship to other demands upon the public purse. Much severe criticism of education arises from the fact that government, especially local government, is operating on a basis inadequate to needs. The utter unsuitability of the tax on real estate as a source of revenue for the schools has been shown as never before during this period.

It is in this respect that we make our chief criticism of the press and its attitude toward educational finance. Instead of reading into the situation the necessity for broad reorganization of the tax base, instead of recognizing that the problem calls for readjustment all around, too many editorial critics appear to view the problem without any perspective at all. Demands for palliative measures, such as the sales tax, or demands simply for "cutting down" expenditures (for example, salaries) are shown in this study to have occupied so much of the editors' time and attention that they seldom find any opportunity, if indeed they recognize it, for a constructive approach to the whole problem. . . . .

More to the credit of American editors is their rather general and fairly vigorous approval of the principle of consolidation and unification of school districts. A study of these comments on school expense shows that frequently they deplore the enormous number of small governing units, and they often advocate the development of the "county unit" to replace what William Allen White calls the "Rip Van Winkle" system. The fact that nearly 90 per cent of all editorial references to consolidation are favorable is evidence that advocates of modernizing the units of administration and instruction will find newspaper support if they seek it. . . . .

When the question of equalization of educational opportunity comes up, the support of newspapers is more doubtful. Here we find a discouraging tendency to put community self-interest first. Apparently there is little acceptance of the principle that the wealthier sections will have to make a contribution, through some equalization scheme, to the maintenance of minimum educational standards in poorer parts of states and nation. Self-interest motivates much of the *favorable* editorial reaction to specific instances of equalization in the form of contributions from the federal government. . . . .

We may conclude from this that public opinion is not yet ready to welcome any equalization program, either state or national, because the validity of the principle has not yet made an appeal to people in general. Only when editorial thinking accepts the value of equalization, in terms of providing for a broad state and national welfare, will it be possible for education to count on much support in this direction from the press.

One is led to suspect that educators have neglected to help the public solve problems of school support. Merely feeling resentment when critics suggest

retrenchment is not enough. Only by long-term, patient, co-operative study of the problem of support for education will a better relationship between the critics of "school spending" and the educators responsible for this spending, be established. The aim of the educator should be to eliminate such epithets as "tax-eaters" from the editorial columns of American newspapers, when education is the topic under discussion. . . . .

In general we must conclude that discussion of educational policy in the American press shows little understanding of the proper relationship between board members and staff. If editors themselves could be better informed about this relationship, they could direct their criticism more intelligently. Perhaps educators could help in defining these relationships so that the public could see a little better where responsibilities begin and end. This would also aid the press to arrive at more intelligent indorsement of candidates for positions on boards of education. It would also be helpful to the editor in passing judgment on the wisdom of legislative acts. . . . .

Treatment of education in the American press suggests that the administrative group in our schools does not show the prominence one may have expected. As suggested in the chapter reporting newspaper criticism on this subject, there are many editorial references to administrators, but two-thirds of them are to college presidents and the heads of higher educational units, and only one-third of them are to school principals and superintendents.

By the tone of these references to the chiefs of higher education and their acts, we are led to the view that public opinion tends to respect them and to regard them, on the whole, as leaders in the national life. But can the same be said of the administrators of our public schools? The evidence points to a negative answer. In fact, although the majority of editorial references to administrators in the public schools are favorable, and although the school administrator escapes the rough handling meted out to boards of education, we are not justified in saying that there is evidence of high regard for him as a leader in the march toward improvement of the social order. . . . .

Two things will strike the educator as significant when he studies the attitude of the press toward the curriculum. The first is the fact that, on the whole, little is said about it. The second is the prevailing lack of understanding of the nature and purposes of the elements criticized.

Less than 9 per cent of all editorial references to education are concerned with the curriculum. The percentage would be smaller if references to military training were not included under this heading. With what we teach in the schools, then, the public is only slightly concerned. Or, if it is concerned, it must be that the problem is thought of as a professional one, in which case the entire burden of curricular development must be thrown back on the educator without benefit of help from the public he serves.

But editors do discuss aspects of the curriculum to some extent, and then it is the nature of their criticism that is alarming. They do, on occasion, launch

attacks on "fads and frills." They ask for a return to "the fundamentals." They deplore the widening of the field of subject matter, condemn elaboration or specialization in subject fields, attack educators at once for becoming too "practical" and for remaining too "cultural."

Here and There among the Schools

ITEMS selected for reporting in this number of the *Elementary School Journal* relate to methods of helping principals and teachers improve their procedures in dealing with problem children, a new practice in distributing school reports, the use of demonstration classes to improve instruction, and new uses of tests.

Clinical work in adjustment of problem children The following account of clinical work in adjustment and guidance which is being carried on in the schools of Birmingham, Alabama, was prepared for us by L. Frazer Banks, assistant superintendent of schools.

During this year there has been tried in some of our elementary schools a clinic in adjustment and guidance of problem children. Principals of elementary schools were invited to request the help of several special departments about one problem child in the school. At the invitation of the principal, the director of the curriculum department, which has charge of the psychological work, coordinated the efforts of the health department, the attendance department, his own department, and any special supervisors concerned in studying this particular child from all angles. The parents were interviewed; a complete case history was obtained; a physical examination was given by a pediatrician; a psychological examination was made; a report from all the teachers who knew the child and a report from the principal were submitted; and, if the child had been handled by any social agencies, pertinent facts in the files of those agencies were introduced. In a preliminary conference of the principal and the representatives of the special departments concerned, all this information was gathered, discussed, and organized in preparation for another conference held with all the teachers in a particular school. At a regular Monday afternoon meeting of all the teachers in the school, the adjustment and guidance of this child then became the subject for discussion with a definite objective, "What can we do to help this child?"

The steps to be taken were listed on the board as they were proposed by the teachers. After a discussion certain procedures were agreed on, which were usually grouped under three heads: (1) What can the school, including the teachers, do? (2) What can we get the child to do? (Someone, usually the principal, had a conference with the child about these points.) (3) What can

we get the home to do? (This conference was usually held by the same person who had talked with the parents previously.)

In all this discussion at the teachers' meeting, the members of the special departments remained in the background, usually participating only to the extent to which they were asked specific questions, or by asking a few leading questions themselves.

We believe that these conferences have been successful, not only in helping the teachers work out their plans, which were of benefit to the children concerned, but also in helping teachers and principals improve their procedures and plans for dealing with other problem children in the school. In addition, the program became a demonstration of the ways in which the participating departments could be of help to the teachers.

A new practice in reporting the work of the schools

Anyone who has been in the habit of reading the reports of city school systems must have been impressed with the great improvement in the effectiveness of these reports during the past few years. Luckily school superintendents and boards of education are taking more seriously their responsibility in giving an account of their stewardship. Statistical data are now being presented in attractive graphic form, and pictorial illustrations are made to carry a message often lost in the older type of report. The most recent annual report of Frank Cody, superintendent of schools of Detroit, is a good illustration of the kind of accounting to the public which many school systems are adopting. The report consists of a sixteen-page rotogravure tabloid which reviews in pictures, with explanatory text, the work, services, membership, costs, and expenditures of the public schools for the year 1937–38. With the assistance of a contribution from the Detroit Teachers Association, the school board has sent the report to every home in Detroit in which there are school children. This is the first time, it is said, that a major city has made such a report to all its citizens.

Demonstration classes for the in-service training of junior high school teachers

From the assistant superintendent of schools, Chester W. Holmes, we have received the following account of an experiment with demonstration classes for teachers in the junior high schools of Washington, D.C.

Provision for the training of teachers in service has long been a part of the work of the District Teachers' College. Junior high school principals have felt,

however, that practical demonstrations of useful techniques of teaching by the teachers' own colleagues in the classroom under normal class situations would furnish invaluable training, not only to teachers new to the system, but also to those teachers who desired to avoid falling into a routine way of teaching and who wanted to learn other approaches than their own to classroom problems.

Three years ago the heads of the subject departments arranged a fixed schedule of demonstration classes in all junior high school subjects, held at the close of school, to which all interested teachers might go. While the attendance was large, the feeling of many teachers was that after-school classes did not adequately parallel practical teaching situations. In the following year, therefore, the demonstration classes were held during the third period, with the fourth period given over to a discussion by the observers and the demonstration teachers under the leadership of the heads of the departments.

During the current school year the demonstrations are being held in the first period in the morning, with the second given over to discussions. As it has been necessary to limit the attendance, only those teachers go who are specially selected by heads of departments or by their principals. A schedule of the demonstration lessons is prepared in advance of each semester and is posted on the bulletin board of each school so that teachers may plan precisely which demonstration lessons they will hope to attend. Demonstrations are held in various parts of the city in order that no particular school be specially favored.

The teachers are enthusiastic about the results of the demonstrations and feel that they are extremely valuable. The classes are not hand-picked but are regular classes which meet the first period. The demonstration teachers are selected for their unusual ability to teach effectively and to use various teaching techniques and devices to secure the goals sought.

Newer testing service in the schools of Baltimore A description of the testing services being employed in the schools of Baltimore comprises the greater part of the *Baltimore Bulletin of Education* for November–December, 1938. In an introductory statement John L. Stenquist comments as follows on uses of tests to improve instruction:

Skilful teachers of vision and energy in various parts of the city are steadily devising new ways of improving teaching through new uses of mental tests. The significant experiments described by Dr. Angela Broening in her article, "Tests That Teach," in this issue, represent one such new use of tests that has extraordinary possibilities. This technique made possible by our development of mechanical scoring equipment and related devices places in the hands of the teacher a new instrument of great teaching power. While by former techniques, after killing drudgery, most tests yielded in actual practice only a total score, or at most subscores in addition to a total score, the coded answer

sheet technique places at the disposal of the student and teacher not only the total score but the results for *every item of the test.* While "item analysis" in itself is not a new discovery, no practical method has heretofore been available by which it could be made use of under the working conditions of our school system. By this technique tests can be "tailor-made" to fit our courses of study and so designed as to focus attention on precisely the objectives desired.

The coded answer sheet when coupled with well-made tests thus becomes a powerful teaching device. For by presenting a complete item analysis it gives, in effect, to the teacher and pupil alike a "microscopic view" of much of the inner workings of the student's mind. It reveals precisely those areas in the student's thinking to which the teacher's and the learner's efforts must be directed if learning is to take place. For it is one of the fundamental laws of psychology that the learner's progress is directly conditioned by his knowledge of the progress he is making. A device such as the coded answer sheet which reveals to the learner so complete a picture of his successes and failures therefore becomes an instrument of very great potential power in learning. In the past this gold mine of detailed information remained buried in test booklets. Now this mass of data becomes available. Thus we have another very practical development in testing—a direct application of the dynamic power of the mental test directed to the learning process itself.

Bulletins and Pamphlets of Special Interest

A number of miscellaneous publications have come to our attention which should be of particular interest to school administrative officers and teachers. They are concerned with study of the curriculum, a survey of published curriculum materials, structural organization of a state's educational system, a summary of research on reading, new types of instructional practice in the elementary schools, activities for the non-recitation period, and community co-ordination.

A guide to study and continued investigation in the field of the curriculum

"Minimum Curriculum Bibliography" is the title of a bulletin recently published by the Department of Public Instruction of Michigan. This bibliography should serve as a guide to general reading in the field of the curriculum and to the purchase of books and documents. It should be of particular value for persons who are interested in the initial stages of curriculum study. Items are classified under the following major headings: "General References," "How To Organize for Curriculum Develop-

ment," "Philosophy, Aims, and Objectives," "How the Child Learns and Grows," "Selecting and Organizing Learning Experiences," "Evaluating the Results of Learning Experiences," "Specialized Areas of Learning," "Lay Education and Lay Participation," and "Bibliographies."

Recent courses of study and curriculum materials Each year witnesses the publication of hundreds of courses of study designed to assist teachers in determining appropriate learning activities and experiences of pupils and in organizing the various elements in the learning situation. Bernice E. Leary, senior specialist in elementary education of the United States Office of Education, has made an analysis of curriculum materials published since 1934 by state, city, and county school systems (United States Office of Education Bulletin No. 31, 1937). The general purpose of the analysis is described as follows:

> The purpose of the study is to determine current practices in curriculum construction as revealed through courses of study, and to discover current tendencies within the content of the courses themselves among various subject fields. It aims to answer such questions as the following:
>
> 1. What agencies are responsible for the construction and revision of recent courses of study?
> 2. What basic principles or underlying philosophies toward education are presented?
> 3. What is the nature of recent aims and objectives?
> 4. How are courses of study organized with respect to grades and subjects?
> 5. What kinds of materials and learning experiences are suggested?
> 6. To what extent do the learning experiences appear to meet community needs and interests?
> 7. What provisions are made for adapting courses of study to the needs, interests, and capacities of individual pupils?
> 8. How are methods and procedures related to the content and organization of courses of study?
> 9. What suggestions are made for measuring the outcomes of instruction?
> 10. How generally may courses in the different subject fields be interpreted as functional?

One important feature of this bulletin is the inclusion of a classified list of some sixteen hundred courses of study published during the period 1934–37.

Important study of the structure and support of a state educational system

There are two fundamental problems which confront educational leaders, to a greater or less degree, in every state in the nation. The first of these is the reorganization of local units of school administration. Some states, it is true, have made notable progress in working out satisfactory structural organizations for their educational systems, but in many others the types of district organization result in waste and inefficiency. The second problem relates to the financial support of education. What obligation does the state have to support education and by what plan of distributing state aid can this obligation best be met? Since these two problems are more or less common throughout the United States, general interest attaches to a recent study entitled *The Problem of School Organization and Finance in Illinois.* The study was made by Professor O. F. Weber, of the University of Illinois, and is published as one of the bulletins of that institution (Vol. XXXVI, No. 15). Professor Weber has made a significant analysis of the administrative organization and financial structure of the school system of Illinois. The study will, of course, be primarily valuable to school people in Illinois, but it should also serve as an example of the kind of investigation needed in other states.

A summary of recent research studies in reading

The Educational Records Bureau has published a bulletin entitled "Summary and Selected Bibliography of Research Relating to the Diagnosis and Teaching of Reading, October, 1937, to September, 1938." The bulletin was prepared by Arthur E. Traxler and Margaret A. Seder. It supplements and brings down to date material reported in an earlier bulletin, which covered the period 1930–37. The first part of the bulletin contains a summary of reading studies organized under such topics as "Reading Readiness," "Reading Interests," "Vocabulary Studies," "Reading Tests and Testing Procedures," "Relationship between Reading Achievement and Other Factors," "Relationship of Eye-Movements to Reading Ability," and "Activity Programs and Informal Methods of Teaching Reading." The bulletin may be secured from the Educational Records Bureau, 437 West Fifty-ninth Street, New York City.

Examples of progressive educational practices in the schools of Michigan

Eugene B. Elliott, superintendent of public instruction of Michigan, has recently published a volume of the Michigan curriculum series under the title *Instructional Practices in Elementary Schools*. The major purpose of the bulletin is to place before the teachers of the state examples of superior practices of their co-workers. The first two chapters of the bulletin are devoted, respectively, to a discussion of viewpoints in elementary education and to criteria for evaluating a unit. The third chapter brings together descriptions of certain new practices classified as "subject units." "By *subject units* is meant those units which, although centered about children's interests, are quite definitely *history units* or *social-science units* or *arithmetic units*, or *others*." They do not ignore the traditional subject divisions, but they provide for more or less correlation or integration. Units of this type are included for each of the first eight grades. Some of the units are presented in detail; others are described briefly. Usually a unit is described under three major headings: "How the Unit Originated," "How the Unit Was Developed," and "Outcomes." Many of the descriptions contain lists of source materials. The description of each unit is preceded by editorial comment which calls attention to the essential features of the unit.

The fourth chapter is entitled "Instructional Practices Involving Many Subjects." The materials presented in this chapter illustrate the development of units which do not emphasize any particular subject field but which cover many cultural areas. The following units are among those included: "Creative Physical Rhythms," "Building a Community," "The Farm," "Our Town," "A Food Unit," and "Soil Erosion and Conservation."

The final chapter, "Administrative Practices Directly Related to Instruction," contains descriptions of a number of administrative innovations designed to facilitate instruction. Among the administrative practices described are the following: "An Ungraded Elementary School," "Vitalizing the Curriculum—A Guidance Program," "An Elementary-School Student Council," and "Home-School-Community Relationships."

The bulletin was prepared primarily for the teachers in Michigan, but it should prove helpful to teachers in all parts of the country.

Children's activities during non-recitation periods The State Curriculum Laboratory at the University of New Mexico has published a volume which should be of interest, not only in New Mexico, but in other parts of the country as well. The bulletin was prepared under the general direction of Marie M. Hughes, director of the laboratory, with the assistance of Blanche Aldrich Jones. It bears the title "Activities for the Non-recitation Periods" and is Number Two of the series "Materials of Instruction." In the first part of the bulletin a distinction is drawn between recitation and non-recitation periods, criteria for the selection of materials and activities for the indirectly supervised time are discussed at some length, and suggestions are offered with respect to the organization and management of the classroom. In the second part specific recommendations are made with respect to activities which foster the development of skills in reading, spelling, and arithmetic. The third part discusses concretely and with numerous illustrations the many constructive activities which children may carry on in the school. A section is also devoted to the evaluation of activities carried forward during the non-recitation periods.

Community councils—a plan for serving youth Educational leaders and other social-minded individuals are becoming increasingly sensitive to the fact that many forces and influences beat upon youth today and that all these forces and influences enter into the processes of education in a vital way. It is also clear that no single institution, such as the school, can control or give direction to all these influences. A closer integration of school and community is desirable, but, even when this co-ordination is accomplished, much remains to be done. In every community there are services which youth require but which can be supplied only through the co-operation of public-minded citizens and organized groups. The recognition that these conditions exist has given rise to a movement which promises much for the future—the movement to organize co-ordinating councils.

The State Department of Education of California has published a bulletin entitled *Co-ordinating Councils in California*, which should be of particular value to all who are interested in the development of such councils. The general purpose of the study is indicated by the following quotation from the Preface.

This report of a study of co-ordinating councils in California attempts to do two things. It attempts first to give an accurate picture of these councils as they have developed over a period of years and as they function today. A second objective has been to present some suggestions to those communities just entering this field by pointing out certain problems to be anticipated and certain requisites for success.

The reader will not find in this report a pattern for the organization of a co-ordinating council in his own community, nor specific instructions as to how to proceed with such organization. He will find descriptions of councils in many different communities. These have been stimulated by different circumstances and have developed under a great variety of leaders; consequently each has certain peculiarities all its own. Each community must develop its own co-ordinating medium to fit its own needs. The resulting organization will differ in certain particulars from all the others. No one community should attempt to imitate another.

An Important Court Decision

The Supreme Court of Illinois has recently rendered a decision which should be of widespread interest. The decision involved the authority of the Oak Park and River Forest Township High School Board to spend public funds for the aid of a private junior college. The board entered into a contract with the Oak Park Junior College whereby the board agreed to improve the laboratory facilities and to purchase the library of the college. The library and the laboratories of the college were to be available to students in the college and in the city high school. For some time the citizens of Oak Park had been considering the desirability of establishing a public junior college, and these arrangements were entered into in order that the board might gather information on the advisability of establishing this type of unit in the educational system of the city. In granting an injunction restraining the board from carrying the contract into execution, the court said in part:

Without considering whether the legislature vested appellees with implied authority to appropriate public funds to defray the expense of an independent investigation to determine whether a public junior college should be established,

we believe the proposed contract is illegal because it contravenes section 20 of article 4, and separate section 2, of our state constitution. Section 20 of article 4 provides: "The state shall never pay, assume or become responsible for the debts or liabilities of, or in any manner give, loan or extend its credit to or in aid of any public or other corporation, association or individual." The language of this section is an expression of a well-settled rule in American jurisprudence that public money cannot be taken for or applied to a private purpose. We have expressly decided that the application of tax money for other than public purposes is a deprivation of property without due process of law (*Robbins* v. *Kadyk*, 312 Ill. 290). As the state does not have power to lend its financial aid to private undertakings, it necessarily follows that the legislature cannot grant to a school board, one of its own creations, a power broader than that which the state itself possesses. Boards of education merely exercise the function of the state in maintaining public schools and can possess no greater power or discretion than the state, in its sovereign capacity, can confer upon them (*Adams* v. *Brenan*, 177 Ill. 194; *Peers* v. *Board of Education*, 72 id. 508; *Clark* v. *School Directors*, 78 id. 474; *Stevenson* v. *School Directors*, 87 id. 255).

Separate section 2 of our constitution in part provides; "No county, city, town, township or other municipality, shall ever become subscriber to the capital stock of any railroad or private corporation, or make donation to or loan its credit in aid of such corporation," etc. A school board is a municipal corporation and by this section is clearly denied the right of loaning its credit in aid of any private corporation. This section was interpreted and applied by us in *Washingtonian Home* v. *City of Chicago*, 157 Ill. 414, and *Murphy* v. *Dever*, 320 id. 186. The question is not one of economy, expediency, public benefit or community desire; it is one of power.

A copy of the written contract was attached to the bill of complaint. Its terms are not in dispute—in fact they have been admitted. The school board filed a motion to dismiss the complaint, and all facts well pleaded therein must be taken as admitted (*Canal Comrs.* v. *Village of East Peoria*, 179 Ill. 214; *People* v. *Holten*, 259 id. 219). The admitted fact that the private junior college, under the contract, agreed to furnish some information to the school board, and the further fact that the school board might at some future time remove the library and laboratory equipment from the private college buildings, show the transaction contemplated a loan of public credit and property contrary to the above-mentioned constitutional provisions. No power existed in the high-school board to make a contract with a private corporation for joint use of its library and equipment, and the Superior Court erred in dismissing the bill of complaint.

Under the facts alleged and admitted, plaintiff is entitled to a permanent injunction, as prayed, restraining the board of education from proceeding with further negotiations, execution and performance of the contract in question. The decree is reversed, and the cause is remanded, with direction to award a permanent injunction.

The University of Chicago Dinner

The University of Chicago Dinner, given annually during the meeting of the American Association of School Administrators, will be held at the Hotel Cleveland, Cleveland, Ohio, on Wednesday evening, March 1, 1939. Alumni, former students, and friends of the University are most cordially invited to attend. It will assist the committee in charge of the arrangements if those who plan to attend will obtain their tickets in advance. Tickets are two dollars each and may be secured from Professor Robert C. Woellner, University of Chicago.

Who's Who for February

The authors of articles in the current issue Carleton Washburne, superintendent of schools, Winnetka, Illinois. Fern H. Bowes, teacher of Grade III at the Brightwood Demonstration School, Washington, D.C. Luella Cole, lecturer in education of the Extension Division of the University of California, and independent research worker and author. J. Lloyd Trump, teacher of social science in the Laboratory Schools of the University of Chicago. Carter Alexander, library professor at Teachers College, Columbia University. William C. Reavis, professor of education at the University of Chicago. Nelson B. Henry, associate professor of education at the University of Chicago.

The writers of reviews in the current issue W. H. Burton, professor of education at the University of Southern California. Edmund deS. Brunner, professor of education at Teachers College, Columbia University. H. C. Christofferson, head of the Department of Mathematics, Miami University, Oxford, Ohio. Mandel Sherman, associate professor of educational psychology at the University of Chicago. William L. Hughes, associate professor of physical education at Teachers College, Columbia University. Mary May Wyman, director of health and safety education in the public schools at Louisville, Kentucky. Walter Barnes, professor of the teaching of English at New York University.

A REPLY TO BROWNELL'S CRITIQUE OF THE COMMITTEE OF SEVEN EXPERIMENTS

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THERE are three ways to evaluate a piece of research. First, the experiment may be repeated under identical conditions for the purpose of checking the findings of the original investigators. This method is almost always followed in the case of important research in the field of the physical and the biological sciences, but rarely in the field of educational science. Second, the experiment may be repeated with one element varied, the effect of this variation being noted. Far too little of this type of evaluation is done in the field of educational science. Finally, the techniques and the conclusions of the investigators may be analyzed from a theoretical standpoint and the defects be pointed out. This type of evaluation is by far the most common and the easiest of the three approaches. It has value. It is the method used by Brownell in his critique of the Committee of Seven[1] investigations of the grade placement of arithmetic (5).

Brownell's criticisms are summed up under three headings: First, the results of the committee's experiments are subject to the limitations which the committee itself pointed out and are of no practical value except in situations duplicating in detail the committee's conditions of research. To quote Brownell's words:

[1] The Committee of Seven of the Northern Illinois Conference on Supervision, in whose behalf and in consultation with whom this article is written, consists of the following persons: Orville T. Bright, superintendent of schools, Flossmoor; Turner C. Chandler, principal of the Burnside School, Chicago; Harry O. Gillet, principal of the University Elementary School, University of Chicago; J. R. Harper, superintendent of schools, Wilmette; Raymond Osborne, while principal of the Francis W. Parker School, Chicago; O. E. Peterson, head of the Department of Education, Northern Illinois State Teachers College, De Kalb; Howard C. Storm, superintendent of schools, Batavia; and Carleton Washburne, superintendent of schools, Winnetka, chairman. Mabel Vogel Morphett, director of research, and William H. Voas, psychologist in the public schools at Winnetka, have been associates of the committee.

> At most, the committee's standards will surely apply only in schools which follow *exactly* its instructional materials. . . . . Changes in the order of teaching the sub-skills, in the quality of previous preparation, in the length of the daily period, in the effectiveness of the motivation, in the number of days allotted the topic, in the thoroughness of diagnosis and remedial instruction—changes in any of these details may be enough to invalidate the committee's findings [5: 499].

He seeks to prove this contention by citing the experiments of Beall (1) and Grossnickle (11), which, he believes, give results that disprove the Committee of Seven findings on the placement of long division.

His second criticism is that the tests used by the committee are too difficult. His third criticism is that the supposed theories of the committee in regard to readiness are divergent and that two of the three are false. Brownell also expresses a fear that the work of the Committee of Seven will deflect interest from problems which, to him, seem more fundamental. This final point obviously needs no answer. Let us take up the other three in order.

If Brownell means what he clearly implies—that the committee's experiments are of no value in a practical situation unless the committee's conditions are exactly followed—no controlled experiment in education would have any value. That he does not really mean this is evident, since Brownell accepts as of practical value the findings of Beall's (1) and Grossnickle's (11) studies on the teaching of long division—studies subject to more limitations than those of the Committee of Seven. According to Brownell's apparent theory, Beall's findings should apply only to schools which use forty-minute periods three times a week for twelve weeks with children of low-fourth-grade ability who are using the particular workbook that Beall used and who are prepared for their work by the Tulsa course of study with the textbooks employed in Tulsa. A similar statement might be made concerning Grossnickle's study. I don't think this point needs to be labored. Brownell's own research (3) and all other research involving controlled conditions would be useless if the conclusions drawn applied only under conditions identical with those of the experiment. Actually, to be safe, we would have to have the same teachers and the same children!

Of course, even in the Committee of Seven experiments, involving, as they did, large numbers of teachers in many different school

systems, the conditions were not really identical. Teachers differed in training, in experience, in background, and in their interpretation of the committee's directions. The time set by the committee doubtless varied up and down somewhat with individual teachers. The children who approached the experiment did so from widely different backgrounds and widely different textbooks.

Brownell complains that "in none of its ten or more articles has the committee given any information about its instructional program for the topics investigated" (5: 499). Unfortunately, educational periodicals do not have the space for the inclusion of these things. The committee has, however, published a bibliography (16) of its studies, which includes, for example, the textbook in meaning of fractions used by the committee; the tests in the foundations necessary for the various arithmetic processes; all the teaching tests and materials for the experiments in the measurement of time, linear measure, and surface measure. Anyone wanting the tests or the teaching materials for any of the experiments had only to write to the chairman of the Committee of Seven, and he would receive them. They are not, however, radically different from the teaching materials and tests used in any good standard textbook, except perhaps for their concentration of a number of phases of a topic in one unit of teaching instead of having these scattered as they are in many textbooks.

Brownell goes on to say:

> The committee grants that different methods of teaching and different materials *might* have led to different mental-age standards, but it regards this possibility, to use the words of the chairman, as "purely hypothetical." Such a grudging acknowledgment might have been justified in 1930, at the time of the first report, although even then the relation between instruction and success in learning was known to be close. Be that as it may, in 1936, even in 1932, the question was no longer "purely hypothetical," the last element of uncertainty having been removed by the announcement of Beall's careful study on the teaching of long division [5: 497–98].

The question of Beall's study will be taken up later. Here I merely wish to take up Brownell's absolute statement that even in 1932 the relation between instruction and success in learning was known to be close. Neither then nor now do we know, a priori, that change in method means change in results. Let's take a few examples.

Hawley and Gallup (13) in 1922 compared the results of teaching spelling words in lists and teaching them in context. They conclude that "there is no advantage in having children write their spelling words in sentences," and they show that in some grades there was a superiority for one method and in other grades for the other method.

Johnson (14) in 1928 compared the lecture-demonstration method, the group laboratory experimentation method, and the individual laboratory experimentation method for teaching high-school biology. He tried the experiments with three separate groups, each doing three sets of experiments. On one set of experiments the pupils using the individual method made the best scores; on another set of experiments those having demonstrations made the best scores, although on the tests they made less favorable scores than did one section of children using the group laboratory method. Johnson concludes: "The outstanding result of this study is that the three particular methods of teaching seem to differ very little in their influence upon pupil learning and still less upon pupil retention."

Burks and Stone (7) in 1929 reported the results of an experiment undertaken "to determine scientifically the relative effectiveness of two distinctly different plans of training in silent reading." They conclude: "It is exceedingly interesting to note that two different plans, each devised by an eminent educator, apparently are of about the same effectiveness for certain training purposes in silent reading."

Cutright (10) in 1934 compared several methods of securing correct language usage, one method consisting of listing language errors and explaining them; another, intensification of correction of errors in oral and written speech; another, drill games; a fourth, a dramatization of the attack on speech errors by the writing of plays and slogans and the preparation of programs; a fifth, the listing by the pupils of errors which they had observed; and a sixth, group planning by the pupils of remedial work. While there were differences in the effectiveness of some of the methods, an examination of the table of results shows that such a confusing array of the methods have reliable, positive differences over the other methods that one has to sum up the differences in various grades if any choice is to be made among them; one method, for example, shows equality with, or

superiority to, another method in one grade and inferiority in another.

Brownell himself (3), reporting in 1933, compared children using a "crutch" in adding proper fractions with those not using such a crutch. He concluded that most groups made the same kinds of mistakes and that the group using the crutch did approximately as well as the non-crutch group.

Crawford and Royer (9) in 1935 compared the teaching of correct English by oral drill on specific errors to teaching with a grammatical approach. They conclude: "The two methods are practically equal in effectiveness as used in this study."

Breed and Ralston (2) in 1936 compared the teaching of addition combinations in isolation and the teaching incidentally in the adding of columns two digits wide. They conclude: "The differences between the mean scores for comparable groups were, in only a few cases, of sufficient magnitude to establish the conclusion with certainty that one method was superior to the other."

Harder (12) in 1937 compared the relative efficiency of teaching homonyms separately and together. He found that for some homonyms there was better learning when they were together, for others there was better learning when they were separate, and for still others there was no difference. He concludes: "The observation should be made that the pupils learned to spell by both methods and that such average differences as existed between the methods were small."

In September, 1938, Brownman (6) compared two methods of teaching experimental geometry, one a lecture-demonstration method, the other an individual laboratory method. While differences were shown in certain outcomes, he says: "There is not enough statistically significant evidence to enable one to lay claims to the superiority of either method when the factors of applications and integrated problems are considered."

These examples are enough to make it clear that nobody can predict in advance that a change of method will bring about a change of results. Certainly there are experiments which can be cited on the other side. Often superiority of one method over another is found, but for any given experiment it is purely a matter of hy-

pothesis, as I said in the statement to which Brownell objects, to assume that the results will be materially changed by a change in method—they may be and again they may not. The only possible way to know is to conduct a carefully controlled experiment, and that is exactly what the Committee of Seven has advocated (16: 698).

The same thing may be said with regard to time allotments. The Committee of Seven indicated the possibility that a change in time allotments would alter results, but again we do not *know*. From the time of Rice's experiments (15) in 1897, when children with long spelling periods every day did no better than children with short periods, right down to the present, there is no evidence to indicate that lengthening assignments beyond a reasonable minimum necessarily increases the effectiveness of the learning. Maybe, if the Committee of Seven experiments had allowed forty-five minutes a day instead of thirty or if long division had been taught for fifteen weeks instead of ten, the learning would have been more effective—and maybe it wouldn't. The only way to know is to conduct a careful experiment, and as yet nobody has done so in this particular field.

Brownell refers to Beall's study (1) on the teaching of long division as refuting the Committee of Seven placement. Beall did an elaborate and thorough piece of work for his Doctor's dissertation, which "purports to be a statistical analysis of pupil responses in his first attempt to gain a mastery over long division under a plan of individual instruction." What Beall shows is that adequate foundations in addition, subtraction, and multiplication, and especially short division, are necessary for a grasp of long division. He also shows that, next to these foundations, mental age is a factor and that scores on a reading test have the least correlation with success in long division. His experiment consisted in giving foundations tests, intelligence tests, and reading tests to low-fourth-grade children in Tulsa, Oklahoma, from seven hundred of whom he obtained complete records. The children were given an individual instruction textbook in long division—a book very well worked out. For twelve weeks during three forty-minute periods a week, the children worked on long division, the other two forty-minute periods being devoted to other phases of arithmetic.

The teaching time and procedures were well controlled and were comparable in many respects to the teaching time and procedures in the Committee of Seven experiments, the major difference being that Beall used an individual-instruction technique by which children progressed at varying rates through their workbook, while the Committee of Seven used a group-teaching technique. The results of Beall's experiments, instead of contradicting those of the Committee of Seven, confirm them to a remarkable degree, insofar as Beall's data made such confirmation possible. Unfortunately Beall carried on the experiment with only low-fourth-grade children, and he presents no data on the percentages of children with the various mental ages in the fourth grade who achieved any specified degree of mastery of the process. What he did find, however, was that 50 per cent of his pupils at the end of the teaching period (he did not give a later test to measure retention) made scores on the Compass Diagnostic Tests in Arithmetic, Test IV, Part 6, at least equal to the high-fourth-grade standard. High-fourth-grade standard on the Compass Diagnostic Tests is 2.8 examples out of 11, the first example being short division, the others long division. (The Compass test in long division is a much more difficult test than that used by the Committee of Seven.) Actually, therefore, in the twenty-minute testing period the median child succeeded in solving correctly one example in short division and two examples in long division.

A comparison of the age and the grade norms in the Compass Diagnostic Tests indicates that fourth grade corresponds to ten years of age. Since Beall's pupils had a normal distribution of intelligence, it may be assumed that the average child in his group had a mental age not far from ten years (unfortunately Beall does not give the average mental ages of his pupils). The Committee of Seven investigations show that 75 per cent of the children with mental ages between nine years and ten months and ten years and five months made scores of 50 per cent on the Committee of Seven test in long division. Comparing the examples in the Committee of Seven test and those in the Compass Diagnostic Tests would indicate that this score is approximately equivalent to what Beall found for his median achievement.

It is evident that a direct comparison of Beall's results with those

of the Committee of Seven is impossible. His data are not presented in such a way as to make accurate comparisons practicable: he used a different test both for foundations and for mastery. Yet insofar as any comparison at all can be made, his results are in complete harmony with those of the Committee of Seven—that is, at the level which he tested. In an experiment covering approximately the same amount of time as the Committee of Seven experiment, his children achieved approximately the same degree of mastery as did the corresponding pupils in the Committee of Seven investigation.

Grossnickle's study (11), also used by Brownell to refute the findings of the Committee of Seven in regard to the placement of long division, was primarily an experiment to determine which of two methods for estimating the quotient was superior. He used 216 pupils in one New Jersey community and 233 pupils in another community, the children being approximately equated as to ability. The experiment lasted from February 5, 1935, until June 4, a total of seventy-six teaching days. The practice material and the teaching methods were controlled. The teaching time was thirty-eight minutes daily. The two methods being compared showed no significant difference. High correlation was found between ability to do short division and success in long division. One rather remarkable feature of this experiment was that at the beginning the ability of the children in division with a one-figure divisor was extraordinarily high; Grossnickle says that the number of errors they made in this test was "lower than the number for any of the groups of students in Grades V–XV [!], inclusive, who had taken the same test in a previous investigation."

Grossnickle used a most unusual method of scoring his test. The number of correct figures in the quotient, including (for "correct score") the remainder, was the score on the example. "Thus, if the quotient given to the example $24\overline{)563}$ is 23, with 11 remaining, the correct score is 3, since both quotient figures and the remainder are correct." By this means of figuring a child who missed all fourteen examples in the final test but who had made only one mistake in each of the examples would receive a score of 64 per cent, whereas in Committee of Seven experiments and in most standardized tests he would receive a score of 0. This way of figuring may account for

the amazing average correct score on the final test of 96 per cent. It is unfortunate that Grossnickle did not at least give, in addition to his own method of scoring, the results of a more usual way of scoring long-division problems. As the matter stands, his data cannot be successfully compared with those of other experiments, and the extreme discrepancy between the results which he secured and those which Beall obtained, and again between Grossnickle's results and those of the Committee of Seven, as far as it appears from these superficial figures, might disappear were the methods of scoring comparable.

Not only on account of the radical difference in the scoring of tests is it impossible to use Grossnickle's experiment to verify or to contradict the Committee of Seven's results. Grossnickle's experiment, like Beall's, was confined to one grade. No distribution is given of the proportions of children at different mental levels who made various scores. The foundations in division with a one-figure divisor are atypically high. The length of teaching time each day was 25 per cent higher than that in the Committee of Seven experiments, and it ran half again as many days (76 days against 50 in the Committee of Seven experiment). Retention tests after a lapse of time were not given, while all the Committee of Seven findings are in terms of retention six weeks after the close of the teaching period. Finally, scores are given in terms of mean achievement, whereas the Committee of Seven findings are in terms of lower quartile achievement—the mental age at which *three-fourths* or more of the children can achieve success.

This last point seems to have been completely overlooked by Brownell and also by Beall and Grossnickle. In every report on the Committee of Seven findings, emphasis has been placed on this standard—achievement of satisfactory results by three-fourths of the children. This standard is, of course, the same as saying that the *lower quartile* score must be approximately 80 per cent on the retention test. The absurdity of comparing the *mean* or the *median* score (as reported by Grossnickle and Beall, respectively) on a test immediately after teaching with a *lower quartile* score after a six-week interval with no reviews is palpable. One cannot possibly prove or disprove the validity of the first finding by showing that

it disagrees with the second. As a matter of fact, agreement between the two would throw serious question on one or the other.

Brownell's second point is that the committee's tests are too hard. He means that they measure the teaching of a topic to completion, rather than measuring one of the intermediate stages of learning. The Committee of Seven has pointed out this fact (16: 701). Most of the committee's findings determine when a topic or a subtopic can be taught *to completion.* Even from the beginning, however, there was some division of topics into subtopics. Thus addition of integers was divided into addition facts with sums of ten and under, higher addition facts, column addition three digits high, and column addition four digits high. Similar subdivisions were made for most other processes. More recently the attempt has been made to subdivide topics further and to find out when the easier aspects can be taught. This subdivision has been done throughout the measurement studies; it has been done for the multiplication facts and for long division; and it is being done for several other units.

Brownell objects to the method of scoring on the ground that the Committee of Seven considered accuracy rather than process. As a matter of fact, in certain experiments the committee has tabulated both accuracy and process, but it has not felt that the process results were of much practical value. If a child knows the process in long division but cannot get the right answer, even after ten weeks of training, just what good is the process doing him? The child, before undertaking the subject, has passed a foundations test showing that he knows how to multiply, how to subtract, and how to divide. Consequently he has the essential tools for long division. If, knowing these tools and knowing the process, he cannot put them together, does he know long division? Actually, in the case of long division with three-place quotients, correcting the test for right process, regardless of correct mechanics, places the topic at the same level as does correcting the tests for accuracy. The committee will be glad to furnish any investigator with process results wherever they have been separately tabulated, but most standardized tests and most schools judge a child's knowledge of a process by his ability to use it with a reasonable degree of accuracy. The committee's standard has usually been about 75 or 80 per cent accuracy.

For those who are satisfied with a lesser degree of accuracy, the committee has suggested the possibility of lowering the level at which the subject is taught.

Brownell makes one other criticism of the tests, referring particularly to the test on addition and subtraction of decimals, in which "ragged decimals"[1] are used. The Committee of Seven certainly does not defend the inclusion of "ragged decimals" in the curriculum, but the fact remains that many textbooks and many curriculums include such examples. *If* a school system is going to teach this kind of decimal addition, it is worth while to know when the teaching can be effectively done.

Finally we come to the committee's supposed theories of maturity. As a matter of fact, the Committee of Seven has no theory of maturity. The chairman's theory will be expressed in the Introduction to the Thirty-eighth Yearbook of the National Society for the Study of Education (8). The Committee of Seven is, however, a fact-finding, research body, not a theorizing body. It has conducted extensive experiments over many years to find out (1) whether, and to what degree, knowledge of foundations, that is, prerequisites, determines success in learning and (2) whether, and to what degree, mental age determines success in learning. It finds that each has a definite influence: the same methods, materials, and time produce strikingly better learning when children have high scores on the foundations tests than when they have low scores, while, among pupils whose foundations-test scores are high, those with higher mental ages (up to a certain point) are usually much more successful in their learning than children with lower mental ages. Whether mental age is predominantly inner growth or predominantly outer experience, or, as seems to the writer more likely, a combination of both, is quite beside the point. The practical fact is that, if a teacher knows a child's score on a foundations test and knows his mental age, she can predict the probability of his success in learning a given topic. The committee has recommended that, if a teacher is not willing to try to teach a topic to completion unless she is assured that at least three-fourths of the pupils will probably be able to

[1] By "ragged decimals" is meant numbers to be added or subtracted with varying numbers of decimal places, such as .47 plus 734 plus .13 plus .005.

learn it sufficiently well to pass a retention test six weeks later with a score of 75 or 80 per cent or thereabouts, she would be wise not to attempt such teaching to completion until her children have attained the mental age and the scores on the foundations test which the Committee of Seven has found to be requisite to the attaining of this standard.

The experiments of the Committee of Seven have not been confined to one or two cities nor to a single grade. They have been carried out in 225 cities in 16 states, with the co-operation of 1,190 teachers, and have involved the complete records of 30,744 children. The grade-placement studies have been carried on over a period of twelve years. The results of these studies have been presented factually, the limitations of the experiments have been frankly acknowledged, further research has been urged (16), and the Committee of Seven is itself continuing its research.

To many people a curriculum based on such research, despite its limitations and the necessary tentativeness of its conclusions, is preferable to a curriculum based on tradition or subjective reasoning. Brownell, apparently, strongly prefers the latter. He quotes himself as saying to those of his correspondents who are trying to use the Committee of Seven placement of topics and who presumably are using arithmetic textbooks with the placing of topics at variance with the Committee of Seven findings:

> Vary your instruction; supplement the textbook presentation; devise new materials; insert new steps if necessary, or eliminate useless steps; and then teach again. When you are convinced that nothing else will relieve the situation, change the grade placement of topics, but only as a last resort. Moving topics upward is an easy way out, but it may be nothing more than a retreat from your problem. At best it is but a superficial solution, and in the end it may raise more problems than it solves. . . . . [5: 506].

This statement would make it seem that Brownell regards the grade placement in the textbook as more likely to be right than the teacher's instruction, than the textbook presentation, than the materials used, than the division of the work into steps. One cannot help wondering what evidence Brownell has for this assumption. One wonders too why he regards an attempt to fit the curriculum to the level of a child's development as a superficial solution and what

ground he has for suggesting that this solution may raise more problems than it solves. Those of us who have used the Committee of Seven placement have found that it is solving far more problems than it has raised—indeed it has raised no serious problems whatsoever.

Research with regard to the total effect of a curriculum based on the Committee of Seven recommendations versus a curriculum organized along traditional and subjective lines is much needed. It cannot well be carried out until enough schools have used the Committee of Seven recommendations for a period of years to make such an evaluation meaningful. Certainly, research is completely lacking to indicate that any harm is done by waiting until children have reached the degree of development, as indicated by foundations tests and mental age, which enables them to attack a problem with efficiency and success.

Bibliography

1. Beall, Ross H. "An Individual Instruction Unit in Long Division." Unpublished Doctor's thesis, University of Iowa, 1932.
2. Breed, Frederick S., and Ralston, Alice L. "The Direct and Indirect Methods of Teaching the Addition Combinations," *Elementary School Journal*, XXXVII (December, 1936), 283–94.
3. Brownell, William A. "An Evaluation of an Arithmetic 'Crutch,'" *Journal of Experimental Education*, II (September, 1933), 5–34.
4. Brownell, William A. "Readiness and the Arithmetic Curriculum," *Elementary School Journal*, XXXVIII (January, 1938), 344–54.
5. Brownell, William A. "A Critique of the Committee of Seven's Investigations on the Grade Placement of Arithmetic Topics," *Elementary School Journal*, XXXVIII (March, 1938), 495–508.
6. Brownman, David E. "Measurable Outcomes of Two Methods of Teaching Experimental Geometry," *Journal of Experimental Education*, VII (September, 1938), 31–34.
7. Burks, Jesse D., and Stone, Clarence R. "Relative Effectiveness of Two Different Plans of Training in Silent Reading," *Elementary School Journal*, XXIX (February, 1929), 431–36.
8. *Child Development and the Curriculum.* Thirty-eighth Yearbook of the National Society for the Study of Education, Part I. Bloomington, Illinois: Public School Publishing Co., 1939.
9. Crawford, C. C., and Royer, Madie M. "Oral Drill versus Grammar Study," *Elementary School Journal*, XXXVI (October, 1935), 116–19.

10. CUTRIGHT, PRUDENCE. "A Comparison of Methods of Securing Correct Language Usage," *Elementary School Journal*, XXXIV (May, 1934), 681–90.
11. GROSSNICKLE, FOSTER E. "An Experiment with Two Methods of Estimation of the Quotient," *Elementary School Journal*, XXXVII (May, 1937), 668–77.
12. HARDER, KEITH C. "The Relative Efficiency of the 'Separate' and 'Together' Methods of Teaching Homonyms," *Journal of Experimental Education*, VI (September, 1937), 7–23.
13. HAWLEY, W. E., and GALLUP, JACKSON. "The 'List' versus the 'Sentence' Method of Teaching Spelling," *Journal of Educational Research*, V (April, 1922), 306–10.
14. JOHNSON, PALMER O. "A Comparison of the Lecture-Demonstration, Group Laboratory Experimentation, and Individual Laboratory Experimentation Methods of Teaching High School Biology," *Journal of Educational Research*, XVIII (September, 1928), 103–11.
15. RICE, J. M. "The Futility of the Spelling Grind," *Forum*, XXIII (April, 1897), 163–72.
16. WASHBURNE, CARLETON. "The Values, Limitations, and Applications of the Findings of the Committee of Seven," *Journal of Educational Research*, XXIX (May, 1936), 694–707.

THE ANECDOTAL BEHAVIOR RECORD IN MEASURING PROGRESS IN CHARACTER

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*

FOR many years teachers have attempted to develop character as an essential part of children's educational growth. Some teachers have kept records of changes in children's growth in character. These records have served three purposes: (1) They have made more objective a teacher's analysis of a child's character. (2) They have been suggestive of next steps in helping the child. (3) They have added some satisfaction to the teacher's work in character development. However, because of the subjective character of the records, none of these purposes has been served adequately by the recording done by most teachers.

In the past five years the anecdotal behavior record has been advocated as an objective method of recording character growth in children. This type of record was originated at the Rochester Athenaeum and Mechanics Institute[1] and was used extensively in the Washington character experiment.

The anecdotal behavior record is a series of recordings of actual behavior responses of children in situations which arise both in and out of the classroom. It is kept, preferably, by several persons, such as the teachers, the parents, and the principal. The persons making the report attempt to record exactly what happened, without adding interpretations of their own. Anecdotes carefully recorded over a period of time give an objective picture of the personality of the child in action.

The single anecdote may be described as a significant bit of the child's behavior which is recorded for study. Illustrative anecdotal records for a third-grade boy follow.

[1] J. A. Randall, "The Anecdotal Behavior Journal," *Progressive Education*, XIII (January, 1936), 21–26.

OCTOBER 28: B. was chosen student council representative by the children.

NOVEMBER 16: The suggestion was made today that teams for games be composed of boys versus girls. B. said three times that he thought the teams should be mixed. The group voted to have boys against girls. He accepted the outcome of the group vote with good grace and entered into the games happily.

NOVEMBER 26: B. took charge of assembly today with fine poise.

As a means of limiting the recording to anecdotes of greatest value, it is first necessary to set up objectives in character education. These objectives must be broad enough to cover the major expected outcomes and yet be specific enough to limit the number of anecdotes in order that the teacher be required to make only a reasonable expenditure of time. A list of objectives which answer these requirements may be found in an article by Charters.[1] From the total behavior of the child, as observed by the recorder, those actions which lie in the field of the character objectives are selected for recording.

Over a period of time the record will normally include anecdotes showing behavior which is in harmony with the objectives set up and behavior which is not in harmony with those objectives. The former type of anecdotes may be called positive anecdotes; the latter type, negative anecdotes. Positive anecdotes may be indicated on the record with a plus sign, and negative anecdotes with a minus sign. If the anecdotes are dated, it is then possible to obtain a qualitative understanding of a child's behavior by reading the record of anecdotes and a quantitative understanding of his progress by counting the plus and the minus signs recorded for him early in the year and comparing these with the number of plus and minus anecdotes for a comparable time later in the year. The value of the numerical record of plus and minus anecdotes, however, is more apparent when a teacher attempts to estimate the progress of a whole class. Reading the records of all pupils in the class would be time-consuming and might not give a clear picture of what had taken place.

Figures 1 and 2, which show the number of plus and minus anecdotes for thirty-nine third-grade children during three parts of a

[1] W. W. Charters, "Experiments in Character Education," *Educational Record*, XV (July, 1934), 289–95.

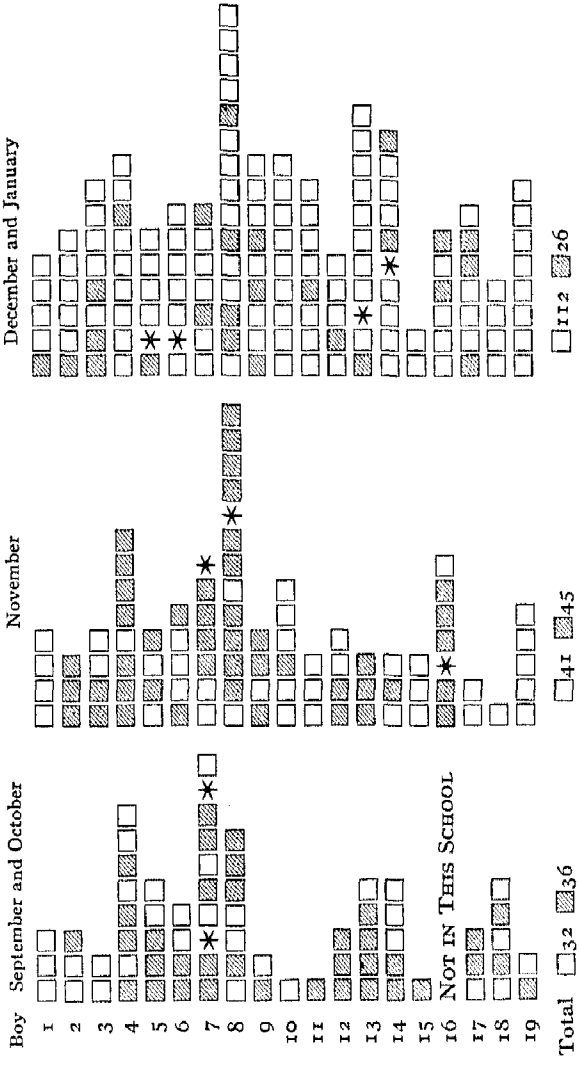

Fig. 1.—Plus (outlined squares) and minus (shaded squares) anecdotes recorded for nineteen boys during three periods in a semester. A star indicates a special conference with a parent.

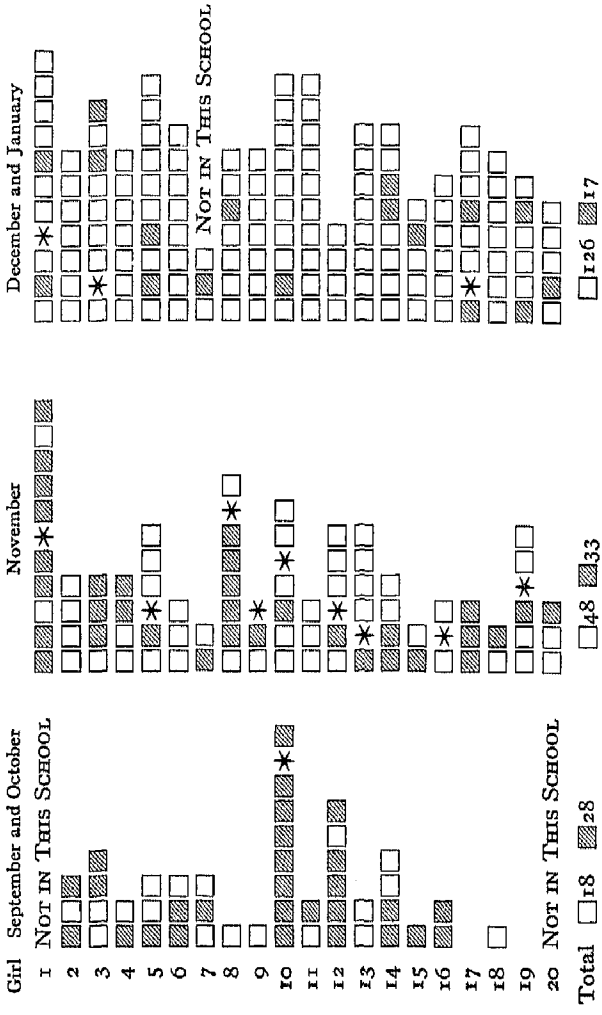

FIG. 2.—Plus (outlined squares) and minus (shaded squares) anecdotes recorded for twenty girls during three periods in a semester. A star indicates a special conference with a parent.

semester, illustrate a method of utilizing anecdotal behavior records. For girls and boys combined there were 50 plus anecdotes and 64 minus anecdotes during September and October. During December and January of the same semester there were 238 plus anecdotes and 43 minus anecdotes. The great increase in the proportion of plus to minus anecdotes is partly due to the intensive parent-education work that was carried on by the teacher of this group. However, experimentation by other teachers with studies of this type would be productive of interesting results.

The technique of recording dated positive and negative anecdotes for obtaining a picture of the progress in character development of an individual child or of a class should prove useful in studying the effects of differing procedures on the character growth of children. It should, moreover, be useful in giving to teachers the same type of satisfaction and encouragement in their work with character education that test results showing improvement in their pupils' reading give to them in the teaching of reading. This procedure will also be of service to teachers in helping them to analyze the progress of their classes toward the character objectives set up. A further step might well be the classification of the anecdotes into large areas or fields of objectives. This classification would further aid in understanding the character level of the individual or the group and would be indicative of next steps with that individual or group.

INSTRUCTION IN PENMANSHIP FOR THE LEFT-HANDED CHILD

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THE PRESENT SITUATION

THERE are more than seven million left-handed persons in the United States.[1] This total is nearly equal to the combined populations of Connecticut, Delaware, Florida, Kansas, Nevada, New Mexico, Oregon, and Utah. The majority of persons in this sizable army write either illegibly or laboriously, or both.

Last autumn, of the two and a half million six-year-old children who (supposedly) entered Grade I, there were approximately one hundred and fifty thousand who preferred their left hand to their right. These pupils are scattered throughout the country on an average of three to each class of ordinary size.[2] Because few of them are found in any one place, they will be trained in penmanship methods appropriate for right-handed children. Day after day throughout their first six school years, they will be taught by conscientious teachers to write badly. Six years from now most of them will emerge from elementary school using handwriting which is barely legible and which is produced awkwardly and at the cost of unreasonable effort. Teachers, parents, and pupils expect this situation; they do not know that these one hundred and fifty thousand pupils will, under ordinary conditions, be merely the innocent victims of an inappropriate method of instruction.

[1] These estimates are based on the results of sixteen school surveys involving a total of more than 260,000 pupils. Taken together, they show that approximately 7 per cent of all boys and 5 per cent of all girls are left-handed. These percentages were applied to (1) the total population of the United States and (2) the number of six-year-old children. The best single reference on this subject is: Charles A. Selzer, *Lateral Dominance and Visual Fusion*. Harvard Monographs in Education, No. 12. Cambridge, Massachusetts: Harvard University Press, 1933.

[2] There appear to be fewer because some left-handed children learn in school to use the right hand. According to figures quoted by Selzer, based on nine school surveys, approximately 30 per cent of sinistrals have been taught in school to use the right hand.

It is the purpose of this article (1) to explain why left-handed pupils develop their customary bad habits and (2) to help teachers so to adapt instruction in penmanship to the natural muscular co-ordinations of left-handed children that these pupils need no longer be warped and twisted by an undesirable method of handwriting.

ANALYSIS OF MALADJUSTMENTS SHOWN BY LEFT-HANDED PUPILS

Emotional attitude.—The first and most obvious source of difficulty has nothing to do with the actual technique of writing. It is purely emotional. From his first day in school a left-handed child is subject to pressure. Both parents and teachers bewail his condition. They may encourage him to use his right hand. Even though nothing is said to him on this point, he may insist on trying to be right-handed because he is uncomfortable under the emotional pressure of being considered queer. If he succeeds in his attempt, he escapes from the nagging criticism—overt or implied—that is the normal lot of the sinistral, but he subjects himself to intense and continued nervous strain. Let any right-handed person who doubts the existence of this strain resolutely write with his left hand for a month; he will gain some insight into the chronic nervous exhaustion that accompanies any effort to alter inborn eye-hand co-ordinations.

The first step in the treatment of left-handed children is the removal of the usual emotional pressure. To accomplish this result, a teacher must begin by altering her own feeling that a left-handed pupil is a nuisance. As long as she has this all-too-typical attitude, she will inevitably communicate it to the pupil. Any child is emotionally blocked if he senses that his teacher thinks him some sort of freak. It is essential that a teacher be totally indifferent in the matter of hand preference. She must literally *not care in the least which hand a child uses.* She must regard a preference for the left hand over the right as no more disturbing than the possession of blue eyes instead of brown. Until the resulting relaxed emotional atmosphere is achieved, any changes in technique will bring only mediocre results.[1]

[1] The advantages of sinistrality may well be stressed, especially for boys. In any sport the "southpaw" holds most of the trumps, even though he often does not know how to play them. The left-handed pitcher and batter are definitely preferred; the left-

Right-handed systems.—Before the abnormalities of position shown by sinistrals are discussed, it seems desirable to describe briefly the essential characteristics of the average system of penmanship in which they are usually trained. The right-handed pupil normally grips his pen somewhat less than an inch from the point, places his paper so that the bottom edge is at right angles to his arm, draws the edge of the pen point up the page, never pushing it,[1] and writes with a slant of about forty-five degrees from the base line. For school work he uses a fine pen point. As he writes, his hand is either beside what he has just written or beside and slightly below it. Because he writes from left to right, his hand automatically stays out of the ink and out of the way of his vision.

The left-handed person, in order to enjoy the same advantages, should completely reverse the position of the paper, the slant of the writing, and its direction. In other words, he should proceed as shown in Figure 1. If such a reversal were possible, there would be no problem at all. This "natural" procedure results, unfortunately, in a reversed script which not even the producer could read. The troubles of the sinistral arise essentially because he cannot write from right to left. He must, therefore, adopt at least the direction of script normal for the right-handed person. In actual practice, the grip on the pen, the angle of the paper, the slant of the writing, and the relation of his hand to the base line are also thrust upon him. The results are usually fatal.

Maladjustments of position.—1. If the pupil's paper, grip, hand position, and slant remain those appropriate for his right-handed neighbors, he generally assumes the position shown in Figure 2. There are three objections to this position. In the first place, the pressure of the pencil causes the paper to "walk away" across the desk. If the right hand holds the margin, the middle of the paper wrinkles and then tears. In the second place, the hand promptly covers every letter as soon as it is written. Even with pencil this

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handed fencer holds a tremendous advantage; and the left-handed boxer has his power in a useful place. It is chiefly inside the schoolroom that use of the left hand appears to be a handicap.

[1] The upstrokes are usually made with the right side of the point and the downstrokes with the left.

arrangement is inconvenient; with a pen it becomes utterly impossible because the hand smears each letter before the ink can dry. Finally, the writer must push the pencil, not pull it. As long as pencil is used, this difference is unimportant, but the school pen has not yet been made which can be pushed directly up the paper from the base line. Anyone who does not believe this statement should grip a pen in the manner shown in Figure 9 (the normal grip for a left-handed person) and try to push it as if he were making the upstroke of an *h*, without either giving the pen a quarter-turn to the right or twisting the hand. Note that the pen is not held as is shown in Figure 7, in which the position of the pen is correct for a right-handed person. If the doubter tries to shove a school pen as a left-handed person has to do in order to produce a Spencerian slant, he will find that the pen does not want to move in this manner. If he pushes gently, the pen usually deposits a blob of ink; if he pushes it harder, it either spatters an entire galaxy of drops or else dives through the paper. After a reasonable amount of experimenting, a left-handed pupil usually hooks his arm across the top of his paper, turns his pen into the exact reverse of the usual position, and writes from the top downwards, thus getting a proper writing edge. Even though a child can push a pencil to produce a slant to the right, he should not do so, because he is building up a habit which will cause him trouble in the upper grades.

2. If a child tips his paper so that the lower edge is at right angles to the arm with which he writes, he has made the first essential adjustment. Teachers from Grade I on must insist that the lower edge of the paper and the arm have the same relationship no matter which hand is used. This tipping of the paper results in a position that seems satisfactory enough. It is shown in Figure 3. This position does not, of course, alter the tendency of the hand to smear what is written or the need to push the pen.

Only a left-handed child can realize the outstanding difficulty of this position. If he were an adult, he could look over his hand by leaning forward a little and could therefore see what he was writing. A child's trunk is disproportionately short, with the result that his hand comes between him and his writing. The illustration in Figure 3 was made from a photograph taken by placing the camera where

the writer's head would be when he sits in a normal position; that is, the view is shown from the adult angle of vision. Even so, the letters *i* and *j* are hidden by the hand. From a child's angle, no letter to the left of the hand would be visible. The fundamental trouble with this position is, then, that the child's hand is in the way. Since he is not tall enough to see over his hand, he turns his hand a bit and peeks under it. This position is shown in Figure 4.

Here is the typical position of the sinistral in the early grades—before use of ink complicates matters. The chief alternative is the posture shown in Figure 2. The position in Figure 4 is a mixture of good and bad. It permits the writer to hold his paper at the proper angle, and it allows him to pull his pencil more often than he pushes it. If the posture could be maintained permanently, it would be acceptable, even though awkward. It cannot, however, be continued. As soon as ink is introduced, the sinistral must abandon this position because his hand smears what he writes. Since he has already twisted his hand a little toward the left, he will probably twist it some more, until it is out of the ink. This procedure ends in the development of the typical "hook" of the left-handed child. The position of Figure 4 is bad, not so much because it causes trouble in Grade I as because it gives training in a technique which will become increasingly unusable as the pupil progresses and, at the same time, will lay the foundation for an incurably bad habit.

3. A change in the position of the paper is the first step toward a correct movement for left-handed pupils, but it does not, in itself, accomplish much if the slant remains unaltered. As long as teachers insist on a "right-handed" slant (a slant of about forty-five degrees to the right), the pupil, as soon as he begins to use ink, must make one of four adjustments. These four are not equally bad, but none of them is satisfactory and only one is even comfortable.

a) The most common adjustment is the completion of the "hook" already started with the pencil. It is illustrated, in its early stages, in Figure 5. This position keeps the hand out of the ink, permits the pupil to see what he writes, and allows him to hold his pen in such a way that he can write with the edge of it. The posture is awkward, however, and the resulting script is usually poor.

When ink is first used, the sinistral writes so slowly in this uncom-

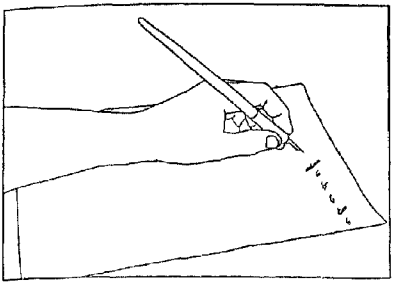

FIG. 1

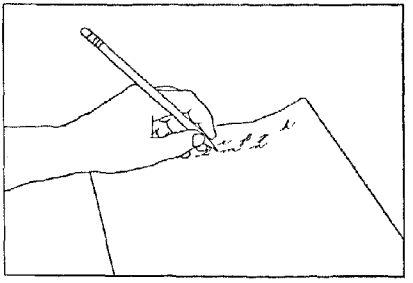

FIG. 2

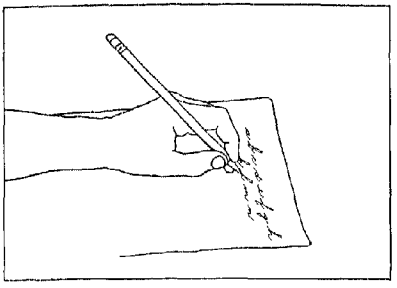

FIG. 3

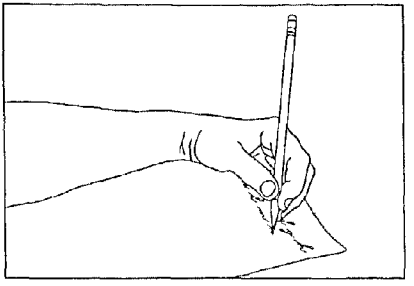

FIG. 4

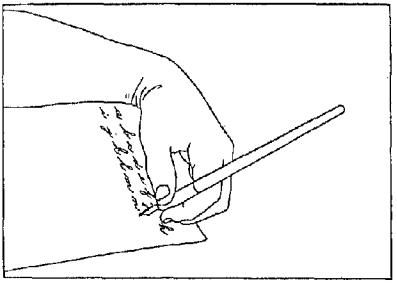

FIG. 5

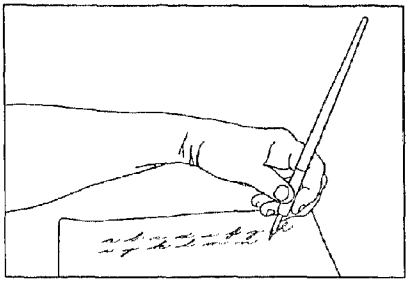

FIG. 6

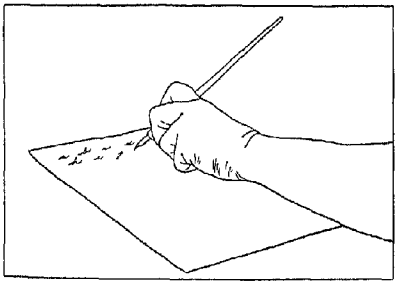

FIG. 7

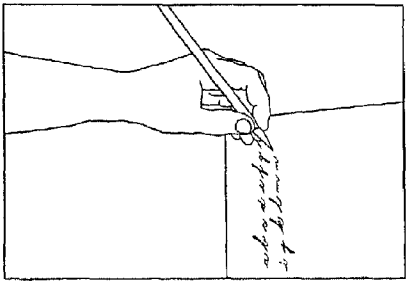

FIG. 8

fortable position that the ink has plenty of time to dry before his arm brushes across it. After a while he develops more speed (although his rate is always low), and he then finds that removal of his hand alone is not sufficient to prevent smearing. He therefore twists his arm around also, thus completing the "hook," as is illustrated in Figure 6. He now practically lies down on the desk, drapes his arm over the top of the page, and twists his pen around until he can write with one side of the point. The pen is, in fact, exactly reversed; instead of using the right side of the pen point for upstrokes, he uses the left. The whole posture is uncomfortable and inefficient. Moreover, it presupposes the presence of a desk to lie on.

b) An occasional child makes a different adjustment by twisting his hand to the right instead of the left and turning his pen until it occupies the same position that it would occupy if it were being held by his right hand. The terrific strain of this position, which is pictured in Figure 7, is obvious. No teacher should ever allow it. Of all solutions, it is the worst.

c) A few children never alter the position developed when they used pencils, the position shown in Figure 4. Since a pupil's hand immediately smears what is written, he resorts to a laborious, unbelievably slow, but simple method of procedure. He writes three or four letters, lifts his left hand off the paper, carefully blots with his right hand the letters just produced, writes two or three more letters, and repeats the business of blotting. When he has perfected this method, he moves with the rhythm of a pendulum; his left hand swings in to write, then his other hand swings in to blot. He often produces a clean page, but the hopeless inefficiency of this method is too obvious to need comment.

d) Finally, there is a small nucleus of intelligent youngsters who discover for themselves the only workable system that produces a "right-handed" slant without serious impairment of effectiveness and comfort. These children merely turn the paper around and write upside down, in the manner illustrated in Figure 8. With this technique the writing is visible, the hand stays out of the ink, the movement is comfortable, and the pen is held normally. Of the four adjustments of the left-handed child to a right-handed system, only this adjustment is comfortable. It is also the only adjustment

that practically no teacher will tolerate! A child may hook his arm uncomfortably over his paper, he may twist himself into a position of strain and misery, he may hold his pen at artificial and absurd angles, he may plod laboriously along with a blotter —no matter how inefficient and unhappy he is, the average teacher will do no more than register a protest. Let him try the only comfortable adjustment, and she descends on him instantly, pestering him until he forsakes muscular relaxation for emotional peace.

Writing upside down is not an ideal solution, but it involves only a mental inversion of the alphabet—a relatively simple trick. There are better methods for the sinistral, but there are also several which are infinitely worse.

The "right-handed" slant.—The various abnormal positions of the pen are developed because teachers insist on the same slant from all children, irrespective of hand preference. As shown in Figure 1, the sinistral's normal slant is to the left, at an angle of about forty-five degrees from the base line. To produce this slant, he has merely to write with the left edge of the point for the upstrokes and the right edge for the downstrokes. The resulting script is exactly as legible as a script that slants to the right. Most teachers, however, are so completely under the domination of present-day systems in penmanship that they will not permit a variation. Since the child does not know that any other slant is possible, he strains and twists himself about in his efforts to meet the demands made of him. There is nothing sacred about any given angle of the finished script. The important thing is to allow pupils to use an angle that is natural and comfortable. There have already been far too many innocent victims sacrificed for the preservation of a Spencerian slant.

CORRECT PROCEDURES FOR TEACHING LEFT-HANDED CHILDREN

An appropriate method of instruction rests on five essentials: correct position of the paper, correct grip of the pen, correct relation between hand and base line, appropriate slant, and a usable writing implement. These matters will be taken up in order. The section will close with a few comments on movement and letter formation.

Position of paper.—As already indicated, the paper should al-

ways be placed so that the lower edge is at right angles to the arm being used (see Figures 1, 3, and 9). It is the special duty of the first-grade teacher to see that the paper is correctly placed. Since a left-handed child tends to imitate his neighbors, the teacher must insist repeatedly on a reversal of the usual position, until the child has developed a habit. If the first-grade teacher allows the pupil to start wrong, she is laying up trouble for him and for all subsequent teachers.

Grip of pencil or pen.—The writing implement must, from the first, be grasped at least an inch from the point, and an inch and a half is better (see Figure 9). The usual right-hand grip prevents the pupil from seeing what he writes; moreover, as soon as he begins to use ink, his hand will make smears. If the pencil is gripped at the recommended distance from the point, even a very small child can see over or around his hand, and he will not be tempted to twist his hand to the left and peer under it.

Again, it is the first-grade teacher upon whom the burden of training falls. It is unfortunate that left-handed pupils can learn so easily and docilely to write with a pencil by the method illustrated in Figure 4. A child who writes for two or three years in this way is practically "set" for the rest of his school career. Yet the position gives practice in two habits that cannot be continued as soon as ink is introduced. The hand must then be moved—usually farther to the left in accordance with the "set" already established—and the pen must be twisted so as to avoid the necessity of pushing it. The starting point of the whole business is the incorrect grasp of the pencil, with the resultant blocking of the child's vision.

Relation of hand and base line.—The right-handed person can keep his hand beside the word that he is writing, or to the right and slightly below the base line, or directly below each word as he produces it. He has a choice because his hand is always resting on the unused part of the page, even if it is held high enough to be actually on the unused portion of the base line. The sinistral has no such choice. His fingers are not so arranged that he can keep his hand to the right of his script, and there is no place at the left that will not smear his writing. He may, of course, hook his arm over the paper and keep his hand far above the base line, but this position is inefficient and

uncomfortable. There remains only one place for his hand: below the base line and far enough below to miss the longest loops.

The correct position is shown in Figure 9. One should note not only the relation of the hand to the base line but also the method of holding the pen, of placing the paper, and of slanting the script.

If the primary teacher has, from the beginning, insisted on the correct position of the paper and the correct grip of the pencil, she will have little or no trouble in the matter of hand position. If a child shows a tendency to twist his hand, she should at once analyze his

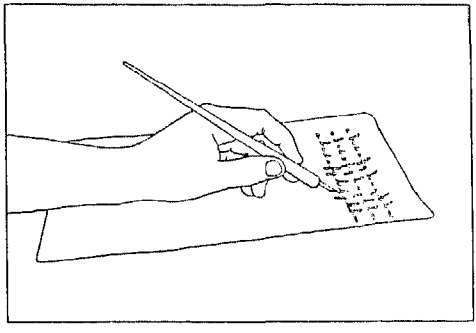

FIG. 9

total position and find out what is wrong. Incorrect placing of the hand is always a result, not a cause. It usually comes from a blocking of the vision because the child has gripped the pencil too near the point.

Slant of the script.—Any slant between vertical and forty-five degrees to the left of the base line is entirely satisfactory. The degree of slant desirable for any given child depends on the precise angle of his paper, the exact distance of his fingers from the point of the pen, and the size and the shape of his hand. If he uses an extreme backhand slant and holds the pen as close to the point as he can and still see over it, he is likely to smear the lower ends of the loops below the base line. Whenever this misfortune occurs, the child should be told to grip the pen farther back or else to write more vertically. Otherwise, he will twist his hand either to the right or to the left and assume some abnormal posture. If the child is comfortable, any slant

from vertical toward the left is as good as any other. The writing in Figure 10 shows two possible slants, both acceptable. Each child should develop the slant which he prefers.

Naturally the slant must be taught from the start. The teacher should be careful to prevent the sinistral from imitating the slant of others. If there are two or three left-handed pupils in the room, it is a good idea to let them work in a group and imitate each other. When the pupils are first given copies of the alphabet, the sinistrals should receive copies properly written even if a right-handed teacher has to

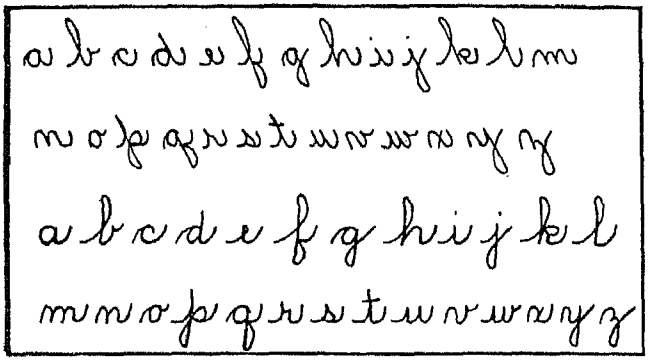

FIG. 10

produce them backhand. For blackboard writing, the teacher should reserve particular places for the left-handed pupils, preferably at a distance from the others, and should write all models with an appropriate slant.

Correct writing implements.—The left-handed pupil needs no special type of pencil. Pupils who have developed a completely reversed slant do not need a special pen. Many left-handed children, however, prefer to write vertically or nearly so, because their hands are less likely to block their vision. In this case they cannot use the regular school pen. They can write with practically any fountain pen, since the points are more or less blunt and will move in any direction. If a nib must be used, either because the child has no fountain pen or because he is not allowed to use one, the point must not be stiff. The profiles of an ordinary and of an appropriate pen

point are shown in Figure 11. Any script that approaches the vertical cannot be produced with the straight point unless the pen or the hand is twisted. With the second point, one can write at any slant whatever.[1] The line is not quite so thin—but relaxed children are infinitely preferable to fine lines. Many a left-handed pupil achieves a rough imitation of this kind of point by turning his pen over and writing with the back. At first he is no better off than before, but soon he forces one of the two prongs slightly out of line and then has a more rounded nib than he had with the pen right side up. Bearing down hard enough to spread the prongs has a similar effect.

FIG. 11

The most appropriate pen points can be bought at Woolworth's. The nibs cost one cent apiece and are stamped with the words "Woolworth Smooth Writing, No. 22, Made in England." When a school is ordering pen points, it should order about 7 per cent fewer of the usual kind and substitute this type for the number omitted. If a school does not furnish them, the teacher should persuade each left-handed child to buy some points for himself. Expenditure of a dime will provide him with at least a semester's supply of pens.[2]

Muscular movement.—The left-handed pupil may use either an arm-movement or a wrist-and-hand movement. In fact, the muscular co-ordinations are exactly like those used by right-handed persons. When a teacher watches two pupils, one right-handed and the other left-handed, she should not be able to observe any difference in movement between the two.

Letter formation.—The proportions of the letters are, of course, the same no matter which hand is used, but the slant should be different. If the writing is vertical, the letters are likely to become somewhat

[1] It is essential that the usual pen point be abandoned. The system here described *cannot* be developed without *a rounded nib.*

[2] The best fountain pens for left-handed children are also obtainable at Woolworth's. The prongs of the point are very slightly upturned as illustrated in Figure 11. The word "Wearever" is stamped on the clip.

rounded. As soon as a left-handed child has learned to write a few letters on the blackboard, he will have shown his preferred slant. The teacher should then give him an alphabet made up of letters having the desired slant and tell him to ignore any other.

A FINAL WORD

Left-handed children can learn to write as easily, as rapidly, as comfortably, and as legibly as anyone else; but they cannot do so as long as they are forced into a system intended for right-handed persons. I have taught dozens of sinistrals by the method described in this article. It works perfectly. Allowing left-handed pupils to twist themselves into strained positions is a form of cruelty to children. A teacher should grasp firmly the idea that the obtaining of *any* feature of any penmanship system is *not worth straining a single child*. Slant, quality of line, standard letter form, arm-movement, customary grip on the pen, standard pen points—not one of these is in itself important. Many a teacher makes a fetish of some feature, usually slant or arm-movement, and will permit no variation. Such a procedure sacrifices the child to the teacher's pet ideas. Let every teacher realize that *any legible writing which is produced without strain is good writing*.

THE LEGAL BASIS FOR DISMISSAL OF TEACHERS BECAUSE OF EXPRESSION OF POLITICAL OPINIONS

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ISSUES sometimes arise with regard to the extent to which a teacher or a superintendent may engage in the expression of political opinions without incurring the danger of dismissal by the board of education. For this report the writer studied judicial decisions in order to ascertain general principles established by the courts.

The amount of judicial authority with respect to expression of political opinions is relatively limited. In an extensive study Edwards[1] refers to but two representative cases dealing with this subject. In one of these a California court held that a teacher may not in the classroom espouse the candidacy of a particular candidate for public office.[2] In the other, an Arkansas case, the court held that a city superintendent had the legal right outside the classroom to oppose vigorously the election of certain candidates to school-board membership.[3] Since the publication of Edwards' study five cases have been decided giving additional interpretations to the problem.

Two decisions have given further weight to the general principle that teachers may not take undue liberties in the expression of political opinions *within* the schoolroom. The first of these cases involved the making of seditious remarks in a junior high school class by a teacher in the schools of Eureka, California. The teacher made statements such as the following: "It is silly and foolish to salute the American flag." "Russia has the best government in the world, and we have one of the worst." "The United States has been the aggressor in every war that we have been in." In affirming a

[1] Newton Edwards, *The Courts and the Public Schools*, pp. 449–51. Chicago: University of Chicago Press, 1933.

[2] *Goldsmith* v. *Board of Education*, 66 Calif. App. 157, 225 Pac. 783.

[3] *Gardner* v. *North Little Rock Special School District*, 161 Ark. 466, 257 S.W. 73.

decision of a lower court upholding the right of the board of education to dismiss the teacher, the court said in part:

> From the foregoing recital of acts and conduct of appellant, his unfitness to be the teacher of children of impressionable age sufficiently appears without further statement or other similar acts or conditions on his part which are disclosed by the evidence. Waiving all other circumstances, his demeanor in the classroom was in violation of the oath assumed by him to obtain his credentials entitling him to teach. . . . . The preservation of our nation depends upon the patriotism of its people. . . . . Our school code gives recognition to the principle that patriotism is to be instilled in the pupils attending our public schools.[1]

The decision is quoted at length since it indicates not only that a teacher may not express political opinions of a controversial nature in opposition to an accepted oath of allegiance but also that the schools are important in the preservation of the existing form of government and are to be used specifically for that purpose.

That teachers may not express political opinions too freely in the classroom is further indicated by an Oregon case. A rule was passed by the board of education requiring that "teachers in the public schools shall, to the utmost of their ability, inculcate in the minds of their pupils, correct principles of morality and a proper regard for the laws of society, and for the government under which they live." The board dismissed a teacher who violated this rule by making statements during school hours intended to create disrespect for the government. The court held that the rule was, of necessity, one of the provisions of the teacher's contract and that the teacher, having violated the rule, might be dismissed by the board.[2]

Two additional cases have been decided by the courts lending support to the general principle that teachers and superintendents may express political opinions as citizens outside the classroom. A Kentucky case, in which a teacher campaigned outside the classroom for a subdistrict trustee favorable to the teacher's election to a position in the schools, is in point. The court, in upholding the teacher's right to engage in this activity, said in part:

> Moreover, there is no showing that Miss Akers did anything that was wrong or corrupt or anything else but what any good citizen has a right to do in the support of the candidates of his choice. This being true, the county board had

[1] *Board of Education of City of Eureka et al.* v. *Jewett*, 21 Calif. (2d) 64, 68 Pac. (2d) 404.

[2] *Bump* v. *Union High School District No. 3*, 144 Ore. 390, 24 Pac. (2d) 330.

no right to adopt a rule that would preclude a school teacher from securing a position in the schools because of such support of a subdistrict trustee.[1]

Thus the court held that a rule with respect to political activities outside the classroom was beyond the authority of the board.

A case involving similar principles was decided in Oregon. A group of teachers were charged with having solicited votes in the district for a larger budget to provide higher salaries and the retention of a music teacher whose position was about to be abolished by the board. The board charged the teachers with insubordination and the arousing of enmities within the school district. The court held, however, that the teachers were within their rights in expressing their political opinions outside the classroom and that they could not be dismissed for such action.[2]

One other judicial decision pertinent to this discussion was found. A statutory enactment in Michigan specified that, at the time of signing or renewing a teaching contract, teachers must subscribe to an oath in support of the state and the federal constitutions. A contract with a teacher who had not taken the required oath was dissolved by the board of education, and the teacher was dismissed. The court, in upholding the action of the board, held the oath to be a necessary part of a valid contract in that state. An agreement to which this oath was not attached was held to be void.[3] The right of a state legislature to require loyalty oaths was thereby upheld.

Although the foregoing discussion indicates a sparseness of legal authority with respect to the problem under consideration, there is agreement on two general principles. Teachers are not allowed to express opinions of a political nature in the classroom if there is definite purpose of inculcating pupils with those opinions and if such ideas are definitely opposed to the existing type of government. In general, no limitation is placed on the political activities of teachers outside the classroom other than those imposed on citizens generally. The exact extent to which opinions may be expressed is a matter of fact to be decided by the courts in each case.

[1] *Board of Education for Logan County et al.* v. *Akers et al.*, 243 Ky. 177, 47 S.W. (2d) 1046.

[2] *Stoddard* v. *District School Board for School District No. 91 in Jackson County et al.*, 140 Ore. 203, 12 Pac. (2d) 309.

[3] *Sauder* v. *District Board of School District No. 10 of Royal Oak Township, Oakland County*, 271 Mich. 413, 216 N.W. 66.

CO-OPERATION IN TEACHING ELEMENTA
PUPILS TO USE LIBRARY MATERI

CARTER ALEXANDER
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THE lag of practice behind the best educational t
ably greater in the case of the effective use of lib
than in the case of any other phase of elementary-sch
all persons interested in improving elementary-scho
this lag at once raises important practical question
most significant of these questions are three: (1) Wh
sentials of the best educational theory in this area? (
chief cause of the lag between theory and practice? (
tical measures can be taken to cut down the lag?

Before these three crucial questions are considered,
to make clear the precise meaning assigned to the
materials." The term as here used means the reading a
materials of a library that are in print. True, good m
also handle pictures for the wall, lantern slides, scien
moving and talking films, musical records, etc. This
ever, considers only printed materials.

MODERN THEORY ON TRAINING IN THE USE
LIBRARY MATERIALS

The essentials of the best modern theory on trainir
school pupils to use library materials effectively inclu
ing points, given here for brevity in the form of prop

1. *In an elementary school that will fit children for r
enriched and expanded curriculum, activities, and proj
use of a great many library materials.* To restrict chil
school to a few prescribed textbooks is no more sensib
pose that their parents live without automobiles, tel
papers, magazines, radio, and motion pictures.

2. *In his use of library materials the elementary-scho*

as early and as far as possible, learn to work independently of the teacher and the librarian. On no other basis can a teacher possibly read and use the desirable library materials with large classes and give to the individual pupil the attention expected in modern elementary-school work. As Dale has pointed out, many of the recommendations in curriculum revision will get nowhere until better instructional aids are available for teaching children to use effectively the library materials freely advocated in such recommendations.[1]

3. *Instruction in the use of library materials should be adapted to the elementary-school children, not the other way round.* The children were not made for the benefit of the library materials any more than man was made for the Sabbath.

4. *If an elementary-school child needs a given library knowledge or skill, there is some feasible way to teach it to him at his level.* This proposition holds for using a dictionary in school or for using commercial catalogues, telephone directories, and time tables outside the school. All these require specific knowledges and skills that are valuable in using a wide variety of library materials. There has been a great deal of poppycock on grade placement of reading, as far as factual information is concerned. For example, last year in a New Jersey elementary school, second-grade children became interested in a mold garden and fourth-grade boys in magnets. Both groups of children found the information that they needed in sixth-grade science books. They had no particular difficulty in reading these sixth-grade books well enough to get the information that they sought. Nonsensical views of placement of other library knowledges and skills are also found. For example, the librarian of a New Jersey city library will not allow pupils to use the card catalogue until they are high-school Seniors. She apparently does not know that Librarian Aldrich at the Horace Mann School teaches third-grade children to use the school library's extensive card catalogue, with splendid results.[2]

5. *The poorer the library materials available for an elementary*

[1] Edgar Dale, "Children's Questions as a Source of Curriculum Material," *Educational Research Bulletin*, XVI (March 17, 1937), 66.

[2] Grace L. Aldrich and Cecile White Flemming, "A Library in Action in a Modern School," *Teachers College Record*, XXXVIII (February, 1937), 389–404.

school, the more its pupils need to acquire library knowledges and skills in order that they may make the most of what they have. This truism should be self-evident, but many elementary-school workers consider it needless to teach any library skills until they have an extensive school library or public library.

6. *Profitable use of library materials requires special reading skills, the acquirement of which is not provided, or is even prevented, by the reading work in many elementary schools.* For example, the painstaking reading of every word in a passage and the oral reading of poetry are highly valuable in their places, but they are of no value and are even harmful when it comes to looking up reference materials in alphabetical, chronological, or numerical arrangements. Here the reader needs deliberately to overlook every word except what he seeks. Sound instruction in elementary-school reading provides for giving the special library reading skills, as well as the skills conventional in such grades.

7. *Grade placement of instruction in library knowledges and skills for elementary-school children varies mainly in intensity and in complexity, not in areas covered.* For example, the ability to find items in an alphabetical list is needed by children from the first to the last elementary-school grade. The ability may be acquired or improved by using the class roll in Grade I, a simple dictionary in Grade III, and the *World Almanac's* Index and the *Abridged Readers' Guide,* in the upper grades.

8. *Instruction in the needed library knowledges and skills for elementary-school children should conform to the soundest psychology of skills.* A pupil can acquire a library skill only by doing for himself something requiring that skill. Such a skill cannot be given him through any amount of mere talking by the teacher or the librarian, nor can he ever acquire it by any method in which the instructor takes all the exercise. He can be induced to practice profitably only when *he* sees the need for practice. A few repetitions when he does see the need will give greater mastery in the skills than much more practice imposed on him.

9. *Testing the acquisition of library knowledges and skills should stress use rather than verbal formulation.* If you want to know whether a person has a given ability, see if he can use it. Note

that this test does not recommend seeing if the person can fluently talk, write, or fill out true-false statements about the ability. The soundest test of all is not what use the elementary-school child makes of library materials in the presence of his teacher or the librarian but what he does long after he has left school.

CAUSE OF THE LAG BETWEEN THEORY AND PRACTICE

Whatever the causes of the lag of practice behind theory in the use of library materials in elementary schools, one cause is easily foremost. This cause, in the writer's experience and observation, is the isolated activities of the individuals or agents involved. Training elementary-school children to use library materials effectively is a co-operative job, its success depending on the team work of various persons. These individuals are the pupil, his teachers, his principal, his superintendent, his school librarian, other librarians involved, and his parents. The finest efforts made by certain of these persons to give effective mastery over library materials may be seriously handicapped by the passivity or the active antagonism of the others.

Examples of the lack of such co-operation and illustrations of the resulting difficulties are numerous, but for clearness and brevity only three typical examples will be considered here. These three examples have to do with (1) library reading knowledges and skills, (2) facility in using items alphabetically arranged, and (3) home study.

Library reading knowledges and skills.—It can scarcely be stated too emphatically that the effective use of library materials requires reading knowledges and skills markedly different from those needed in other kinds of school reading. A librarian, or any teacher who emphasizes the use of library materials, knows this fact, but many other teachers do not know it and their failure to co-operate here will undo much that a librarian or the finest teacher may do. For instance, elementary-school children cannot fully appreciate poetry unless they read it aloud, word for word. In using many library materials, especially reference books, one needs deliberately to avoid reading all words except those likely to deal with the precise information desired. "Going around Robin Hood's barn" is a mild characterization for trying to find a name in a telephone directory or a similar

listing by reading every word until one reaches the name sought. A librarian knows also that a child should come to library materials with a definite thing to be sought and, in his reading, deliberately omit everything not bearing on that purpose. What training for such reading are teachers giving a child when they require him on a book report to give abstracts of the book instead of telling about what deals with his needs or when they insist that he read thoroughly every book, even fiction, which he starts? As a matter of fact, a boy who reads the first few chapters of a story, then the end, and never the intervening chapters unless the other parts interest him sufficiently, is pursuing a highly valuable kind of library reading. He is learning to look for what meets his needs and to rule out all else.

Alphabetical arrangements.—The importance of being able to find information among items alphabetically arranged would seem self-evident. Many elementary-school teachers may have faith in this skill, but their works are not in evidence. Otherwise their classrooms would not contain dictionaries and individual encyclopedia volumes which are badly worn at the beginning and fresh at the end. Children using reference books in that way do not know the alphabet for practical library purposes; they always begin at the first and run down the whole preceding alphabet to find the letter they need. Again, a teacher who marks all the misspelled words in a set of pupils' papers is losing a fine chance to have children use a dictionary with its alphabetical arrangement. If she tells a boy that he has three misspelled words on a page without indicating the mistakes, insulates him except for a dictionary, and tells him to find and correct his own misspellings, she is co-operating in teaching the use of an essential library skill. The writer has seen elementary-school teachers who seemed proud of the fact that their pupils did not know the alphabet. They will never be called blessed by any pupil who must later use reference books or an office filing system. The elementary classroom teacher has a splendid chance to co-operate in teaching alphabetical arrangement by setting up a classroom card file somewhat similar to, but much simpler than, the library catalogue. The writer has fully described such a file in an earlier article.[1] He has had enthusias-

[1] Carter Alexander, "A Library Aladdin Lamp for the Classroom," *National Elementary Principal*, XVII (December, 1937), 69–71. (Also, with comment by Ellen Fletcher, in: *Wilson Bulletin for Librarians*, XIII [November, 1938], 179–81, 189.)

tic approval of this card-file idea from school librarians and many classroom teachers.

Home study.—Superintendents, principals, teachers, librarians, and parents who strive fanatically to abolish all home study seriously injure their pupils and children in learning to use library materials effectively. While certain undesirable types of home study are thus avoided, the net result is likely to be a great loss. Such persons turn out children accustomed for years to working with library materials under the eye of the teacher or the librarian. Then they pitch these children out into forty years of adult life where the individual must work with library materials on his own initiative. Why should a boy, who would resent being physically carried by his teacher or the librarian, be carried in his use of library materials until he is as big as his teacher? Weaning at the proper time is as essential in teaching children to use library materials as it is in rearing infants.

WHAT CAN BE DONE TO SECURE CO-OPERATION

It is usually easy to show the need for team work among individuals engaged in an undertaking the success of which depends on their effective co-operation; it is much harder to give practical recommendations for bringing about such co-operation. We can at least start with the experience axiom that co-operation in any group never comes when all the individuals in it proceed on the principle of "letting George do it." That method always winds up with "what is everybody's business is nobody's business."

Somebody has to take the lead or submit a program of action. In elementary-school work that somebody is most likely to be a teacher, a principal, a superintendent, or a school librarian. The eventual co-operation of other school workers and other librarians and of pupils and parents can be confidently expected by any school worker or librarian who will actually show what can be done in using materials in elementary-school work and who presents a feasible program for such work.

A list of library lessons is not the first thing needed in formulating such a program. Many of these are available in courses of study or workbooks—and have been available for years with precious little effect. What is needed is for each teacher to lay out the library knowledges and skills actually needed by her pupils in school and in

their outside interests. It will then be time enough to consider how to teach these knowledges and skills and to select the library lessons needed. The writer has prepared an extensive check list of such knowledges and skills, put up in convenient form for practical use by teachers.[1]

Once the library knowledges and skills needed by a particular teacher are listed, she and the school librarian, or a public librarian, can work together on the best ways of teaching them. Both have much to contribute, and the instruction will be all the better for being a joint effort. The librarian may come into the classroom for short basic lessons, and the teacher can carry on between lessons just as she does with special teachers of music and physical education. In particular, the teacher can have some systematic arrangement of library materials and a classroom file, as previously described, which will give her children a much better understanding of why books are systematically arranged and catalogued in the library than the librarian alone would ever be able to achieve.

The teacher, because of her constant emphasis on use, would also help the librarian and prevent such cataloguing as the writer saw in a certain elementary-school library where the children were supposed to use three separate catalogues, namely, author, title, and subject files. A teacher also is likely to influence the librarian to put as many books as possible on open shelves instead of in the stacks. The librarian is likely to show the teacher that no elementary-school child should ever consider using library materials unless he knows what he needs them for. The librarian can lead him to books that will give him information, thrill him with adventure, entertain him, put him to sleep, or what not, but the purpose must always be definite.

The best way to get the co-operation of pupils and parents is to give them actual evidence of what effective use of library materials will do for the children. The writer has found that elementary-school children like the idea of putting library slaves to work for them as Aladdin did the slaves of his lamp.[2]

[1] Copy will be sent on application to any reader who sends nine cents for postage to Carter Alexander, Teachers College, Columbia University, New York City.

[2] Carter Alexander, *op. cit.* A fuller discussion of the lamp idea may be found in: Carter Alexander, "Library Aladdin Lamps for Schoolmen," *School Executive*, LVII (October, 1937), 62–63, 90.

The prospectuses and teacher helps put out by the Compton and the World Book encyclopedias are excellent for converting parents to their children's need for knowing how to locate information. Much can be done also to induce interested parents to give their children at Christmas something besides fiction, a *World Almanac*, for example.

As regards more extensive library materials for the school, a highly intelligent use of whatever is available will get parent support for richer provision. The library movement in elementary schools is very recent, and, like all late improvements, the library will obtain better equipment only as it shows full use of whatever is already at hand. A lot of free or inexpensive material is always available. For example, in any rural or small-town area there are usually in the homes of the children enough mail-order catalogues for some effective lessons on using an index.

At all events, anyone trying to secure co-operation on training elementary-school children to use library materials effectively has one talking point that simply cannot be gainsaid: When an elementary-school child has learned to use library materials effectively by himself, he has actually learned how to do something that he will need to do all his life. If he ever amounts to anything, he will be doing just that long after he has forgotten who taught him to do it, or when, or how.

SELECTED REFERENCES ON PUBLIC-SCHOOL ADMINISTRATION. II

WILLIAM C. REAVIS AND NELSON B. HENRY
University of Chicago

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THE January number of the *Elementary School Journal* presented selected references on general administration, state school administration, city school administration, and supervision. The references presented in this article are concerned with teaching staff, school finance, business management, and public relations. The period covered in the selection of the references is November 1, 1937, to October 31, 1938.

TEACHING STAFF

62. BOWERS, HAROLD J. "Ten Principles of Teacher Certification," *American School Board Journal*, XCVI (June, 1938), 41–42, 92–93.

Sets forth ten principles "consistent with our current educational philosophy and practice" to insure the attainment of the objectives of teacher certification.

63. BOWLIN, JAMES A. "Attitudes toward Reasons for Discharge of Teachers," *School Review*, XLVI (September, 1938), 532–38.

A study of the opinions of school administrators, teachers, patrons, and pupils concerning actions and behavior which are valid reasons for discharging teachers.

64. CAROTHERS, MARY M. "How Detroit Hires Its Help," *Nation's Schools*, XXII (September, 1938), 35–37.

Describes the methods used in selecting and administering "noneducational" personnel in a large city school system.

65. COULBOURN, JOHN. *Selection of Teachers in Large City School Systems*. Teachers College Contributions to Education, No. 740. New York: Teachers College, Columbia University, 1938. Pp. x+178.

A survey of administrative practices in the thirty-seven largest cities, with suggestions for basic criteria and standards to be employed in selecting teachers.

66. DEFFENBAUGH, W. S. "Know Your Superintendent of Schools," *American School Board Journal*, XCVI (March, 1938), 53, 88.

A discussion, "addressed to new school-board members," of the powers, the duties, and the relationships of the superintendency.

67. DEFFENBAUGH, W. S. "Know Your Principal," *American School Board Journal*, XCVII (July, 1938), 54, 84.

Considers the duties and qualifications of the principal and his relations to other members of the staff.

68. MCABOY, CHARLES E. W. "Judging the Elementary-School Principal," *American School Board Journal*, XCVI (February, 1938), 26.

Discusses the qualifications of the principal and gives a rating sheet on the effectiveness of his relations with pupils, teachers, the community, and the superintendent.

69. MATZEN, JOHN M., and KNAPP, ROBERT H. "Teacher Participation in School Administration," *American School Board Journal*, XCVII (October, 1938), 27–28, 87.

Eighty-nine superintendents in the Middle West indicated the degree to which their teachers participate in twenty-nine administrative functions. Advantages, dangers, and outcomes of teacher participation are discussed.

70. PARK, DOROTHY G. "A Fourteen-Point Code for Superintendent and Teachers," *American School Board Journal*, XCVI (June, 1938), 22–23.

Criteria for establishing the ideal relationship between teacher and administrator.

71. PETERS, D. W. "Married or Single?" *Nation's Schools*, XX (December, 1937), 41–42.

A study of the comparative teaching ability of married and single women teachers.

72. PITTENGER, B. F. "School Administration and School Personnel," *American School Board Journal*, XCVII (July, 1938), 17–18, 87.

Emphasizes the necessity for care in the selection of personnel for co-operative participation in the formulation and the execution of school policies.

73. SAYLOR, GALEN, and SUBCOMMITTEE ON RETIREMENT OF THE EDUCATIONAL PLANNING COMMISSION. "A Teachers' Retirement System for Nebraska." Nebraska State Teachers Association, Educational Bulletin, Mimeographed Series II, No. 3. Lincoln, Nebraska: Nebraska State Teachers Association, 1938. Pp. 59 (mimeographed).

Analyzes the retirement practices of various states and outlines the main elements of the proposed system for Nebraska.

74. SCATES, DOUGLAS E. "Ten Years of Experience with a Single-Salary Schedule," *American School Board Journal*, XCVI (March, 1938), 31–32, 92.

The author discusses the advances made under the schedule which gives equal pay for equal training and experience. The success of the plan is evidenced by the recent adoption by the school board of the new schedule on the single-salary basis.

75. SCOTT, CECIL WINFIELD. "Pennsylvania's New Protective Teacher-Tenure Law," *American School Board Journal*, XCV (December, 1937), 33–34.

A discussion and an evaluation of the protective-tenure law of Pennsylvania, which grants permanent status to all teachers serving under contract in the public schools.

76. SCOTT, CECIL WINFIELD. "Protective Teacher Tenure," *American School Board Journal*, XCVI (April, 1938), 29–32.

The author evaluates the major claims for protective teacher tenure, states the valid arguments for the plan, and makes recommendations for legislation.

77. WOELLNER, ROBERT CARLTON, and WOOD, M. AURILLA. *Requirements for Teaching Certificates*. Chicago: University of Chicago Press, 1938 (third edition).

Brings up to date information on the requirements of the regional associations, the various states, and the possessions of the United States.

SCHOOL FINANCE

78. ADVISORY COMMITTEE ON EDUCATION. *Report of the Committee*. Washington: Government Printing Office, 1938. Pp. xii+244.

A summary of the committee's findings and recommendations regarding federal aid for public education.

79. BITTERMANN, HENRY J. *State and Federal Grants-in-Aid*. Chicago: Mentzer, Bush & Co., 1938. Pp. x+550.

A general treatise on grants-in-aid and their relations to various phases of the social order.

80. BLOSE, DAVID T. "Per Pupil Cost in Public Schools," *School Life*, XXIII (December, 1937), 111.

A brief statistical report of current expenses in state school systems.

81. CHISHOLM, LESLIE L. "Figuring Financial Ability of States To Support Public Schools," *Nation's Schools*, XX (November, 1937), 37–38.

Considers the percentage of total tax revenue which state and local governments might reasonably be expected to devote to the support of their schools.

82. COMSTOCK, LULA MAE. *Per Capita Costs in City Schools, 1936–37*. United States Office of Education Pamphlet No. 81, 1938. Pp. 24.

An analysis of current expenses in 308 city school systems.

83. CORNELL, F. G. "To Stabilize State School Support," *Nation's Schools*, XXI (May, 1938), 31–33.

Proposes a formula for stabilizing the proportion of total school costs to be borne by state and local units.

84. COVERT, TIMON. *State School Taxes and State Funds for Education and Their Apportionment in Seven States, 1934–35*. United States Office of Education Pamphlet No. 78, 1938. Pp. iv+22.

Describes the apportionment to schools of the revenues provided from statewide sources in California, Colorado, Indiana, Michigan, Mississippi, Tennessee, and Wyoming.

85. COVERT, TIMON, and KEESECKER, WARD W. *Legislative Plans for Financing Public Education.* United States Office of Education Pamphlet No. 79, 1938. Pp. vi+44.

Discusses basic principles, present practices, and trends; gives examples of state plans; provides a check list for evaluating existing systems; and outlines a hypothetical plan, which includes important desirable features.

86. CYR, FRANK W., BURKE, ARVID J., and MORT, PAUL R. *Paying for Our Public Schools.* Scranton, Pennsylvania: International Textbook Co., 1938. Pp. x+198.

Written to give the average layman, clearly, concisely, and briefly, the facts and principles that he needs to answer questions on school finance.

87. *Finance and Business Administration.* Review of Educational Research, Vol. VIII, No. 2. Washington: American Educational Research Association of the National Education Association, 1938. Pp. 108–212.

A review of the research in the period from December, 1934, to December, 1937. A number of studies in the field of public administration and public finance have been included where applicable to education.

88. FITZPATRICK, F. B. "Buying Educational Service," *Virginia Journal of Education*, XXXI (April, 1938), 271–72.

Reviews expenditures for educational service in 1933–34 and compares costs of education in rural and urban sections of the United States as a whole and in the state of Virginia.

89. GANDERS, HARRY S. "Federal Relations to Education, 1931 and 1938," *Nation's Schools*, XXII (July, 1938), 18–20.

A comparative summary of two important reports on the problem of federal relations to education in the United States.

90. HAUSER, L. J. "An Evaluation of the Differential in State Aid in Terms of Adaptability," *American School Board Journal*, XCV (December, 1937), 23–24.

An argument for determining relative school costs instead of relying merely on current practice as a criterion for establishing differentials in state and federal aid between elementary and high schools.

91. KINDRED, L. W. "Nonpublic School Support," *Nation's Schools*, XXII (October, 1938), 21–22.

A review (1) of the constitutional restrictions on the use of public funds for nonpublic schools and (2) of court decisions involving indirect forms of aid.

92. MORGAN, WALTER E. *Financing Public Education in California.* State Department of Education Bulletin No. 15. Sacramento, California: State Department of Education, 1937. Pp. viii+22.

Describes the present state system of school finance.

93. MORT, PAUL R., and LAWLER, EUGENE S. "Comparison of the Ability of Rural and Urban Areas To Support Education," *Elementary School Journal*, XXXVIII (January, 1938), 337–43.

Gives data from five states showing the comparative abilities to support education in districts of varying degrees of urbanization.

94. REEVES, FLOYD W. "Federal Relations," *Nation's Schools*, XXI (March, 1938), 25–27.

The chairman of the President's Advisory Committee on Education lists ten essential elements that he believes should be incorporated in legislation providing federal assistance to education in the states.

95. *Why Schools Cost More.* Research Bulletin of the National Education Association, Vol. XVI, No. 3. Washington: Research Division of the National Education Association, 1938. Pp. 127–78.

Surveys the trend in school costs from 1870 to 1936, with special attention to the period 1914–30. Shows the degree to which certain factors have influenced the rise in school expenditures.

BUSINESS MANAGEMENT[1]

96. ALMACK, JOHN C. "Making the Salary Schedule," *American School Board Journal*, XCVI (April, 1938), 19–20; (May, 1938), 23–25.

The chief reasons why teachers' salaries are low, according to the author, are (1) the tendency to promote the educational program at the expense of the workers, (2) the theory that teachers should render service without pay, and (3) the lack of a sound basis on which to compute their compensation. Principles which should be recognized in providing just salaries are proposed.

97. CRAWFORD, WILL C. "Adequate, Well-located Sites in a Long-Range School Building Program," *American School Board Journal*, XCVI (April, 1938), 45–46.

Suggests criteria for selecting a school site and presents a score card with weighted items.

98. DARLEY, W. G. "Lighting—First or Last?" *American School Board Journal*, XCVI (June, 1938), 25–28.

Urges adherence to recommended standards of illumination for schools. Helpful suggestions and supporting data are given.

99. GARVER, HARLIE. "Appraising for Insurance," *Nation's Schools*, XXI (May, 1938), 53–55; "Facts on Insurance," ———, XXII (September, 1938), 55–57.

A discussion of the need for accurate periodic appraisal of school property, adequate insurance coverage, proper distribution of policies and premium dates, and frequent inspections.

[1] See also Item 528 (Engelhardt) in the list of selected references appearing in the November, 1938, number of the *School Review*.

100. HALSEY, R. H. F. "How Much Light for Schoolrooms?" *American School Board Journal*, XCVI (January, 1938), 27–28.

Considers the question of lighting from the viewpoint of costs and criticizes the lack of agreement on standards of school lighting which might be determined by scientific research.

101. HARRISON, W. K., and FOUILHOUX, J. A. "Reducing the Cost of School-Building Construction," *American School Board Journal*, XCVI (January, 1938), 49–50.

Lists the items which go to make up the total cost of a school plant and gives suggestions regarding the points at which possible reductions may be made.

102. JOYNER, S. C. "Buying School Insurance," *American School Board Journal*, XCVI (March, 1938), 51–52, 91.

A comprehensive statement of factors considered in the rate-making procedure for each type of insurance generally carried by school districts.

103. MCCLINTON, J. W. "Problems of School Buying in Intermediate and Smaller School Districts," *American School Board Journal*, XCV (November, 1937), 36–37.

Notes four problems pertaining to school buying and advocates a policy of selective buying.

104. MILLER, CHESTER F. "Control and Storage of Supplies," *Nation's Schools*, XX (December, 1937), 57–58.

Reports advantages and disadvantages in various procedures followed by school-supply departments.

105. MOREY, VICTOR P. "Progress in Uniform Fiscal Procedure," *American School Board Journal*, XCVI (April, 1938), 43–44.

The data given show the rapid growth of standardized accounting systems and suggest the desirability of state-prescribed classifications to make possible comparison of various types of expenditures.

106. ROGERS, JAMES FREDERICK. *The School Custodian*. United States Office of Education Bulletin No. 2, 1938. Pp. vi+44.

Report of a nation-wide survey of practices relating to selection, training, duties, supervision, and salaries of janitors and janitor-engineers in school systems of various sizes.

107. SCHMIDT, H. W. "Some Blunders in School-Building Planning," *American School Board Journal*, XCVI (January, 1938), 29–32.

Furnishes examples of the results of bad or careless planning and indicates that much improvement could be made by designers.

108. *The School Plant and Equipment*. Review of Educational Research, Vol. VIII, No. 4. Washington: American Educational Research Association of the National Education Association, 1938. Pp. 365–492.

A review of the research that has been made in the field during the period of April, 1935, to April, 1938.

109. *School Supplies.* National Association of Public School Business Officials, Bulletin No. 6. Pittsburgh, Pennsylvania: National Association of Public School Business Officials (H. W. Cramblet, Secretary, 341 South Bellefield Avenue), 1938. Pp. 144.

A report of studies made under the direction of the association's Research Committee on Supplies and Equipment. Deals with selection, purchase, storage, and distribution of supplies in city school systems.

110. STOUFFER, S. M. *Report of the Superintendent of Public Schools of the City of Wilmington, Delaware, for the Biennium Beginning July 1, 1935, and Ending June 30, 1937*, pp. 107–13. Wilmington, Delaware: Board of Public Education. (Quoted in: "The Wilmington Program of School-Building Operation," *American School Board Journal*, XCVII [October, 1938], 60, 62.)

Describes the maintenance and operation plan for the city schools, which has been particularly effective through the application of carefully considered policies of personnel management.

111. VILES, N. E., and CARPENTER, W. W. "Building Maintenance and the School Janitor," *American School and University*, X, 215–18. New York: American School Publishing Corp., 1938.

A discussion of factors making for poor janitorial service. Offers suggestions regarding qualifications, relations, responsibilities, and training of janitors.

PUBLIC RELATIONS[1]

112. CARTER, T. M. "Citizens Evaluate Their Schools," *School and Society*, XLVII (June 4, 1938), 719–23.

The complexity and the indefiniteness of social forces and social demands make it impossible to set up a table of absolute values upon which certain social, moral, and ethical objectives of the schools may be evaluated.

113. EYE, GLEN G. "The Public School and Special-Interest Influence," *American School Board Journal*, XCVI (May, 1938), 44–45.

A brief analysis of types of pressure groups, desirable and undesirable, which seek to use the schools for their own purposes. The author proposes "five tests worth applying" in dealing with these groups.

114. GREENE, RICHARD T. "The Board of Education and the Public," *American School Board Journal*, XCVII (October, 1938), 19–21.

A board member points out that the local board of education is the means through which the people keep control of the schools.

[1] See also Item 413 (Chambers) in the list of selected references appearing in the September, 1938, number of the *Elementary School Journal* and Item 529 (Engelhardt) in the November, 1938, number of the *School Review*.

115. MOEHLMAN, ARTHUR B. *Social Interpretation.* New York: D. Appleton-Century Co., Inc., 1938. Pp. xiv+486.

Develops a functional concept of "social interpretation" as basic and complementary to all institutional planning and progress, laying emphasis, of course, on public-school interpretation.

116. MOFFITT, FREDERICK J. "Board of Education vs. Parent-Teacher Association," *American School Board Journal*, XCV (November, 1937), 19–21, 95.

Discusses the place of the parent-teacher association in school affairs.

117. RELLER, THEODORE L. "An Improved Public-Relations Calendar," *American School Board Journal*, XCVII (September, 1938), 24–26.

A calendar is suggested as a means of insuring serious consideration of the planning and the execution of the public-relations program.

118. ROSSBACH, EDITH. *Parent-Teacher Activities at Lincoln School.* New York: Teachers College, Columbia University, 1938. Pp. xiv+42.

A description of the school-centered, parent-centered, and community-centered activities of the Lincoln School.

119. SEXSON, JOHN A. "Public Relations," *School and Society*, XLVII (March 19, 1938), 353–59.

Urges the need for desirable objectives in a public-relations program and enumerates several such purposes.

120. STRACKE, GEORGE A. "Pictures and Public," *Nation's Schools*, XX (December, 1937), 30–32.

Makes suggestions on the use of photographs and motion pictures as a means of interpreting the schools to the public.

Educational Writings

*

REVIEWS AND BOOK NOTES

DEMOCRACY IN SUPERVISION.—The dominant emphasis on democracy and co-operation in education has for some time been affecting supervisory theory and practice, but analytic discussions which actually implement democracy in supervision are rare. The volume here reviewed[1] is the third publication of 1938 attempting to suggest democratic practices in supervision. The Preface states:

> Administrative and supervisory officers have been reluctant, in many cases, to share their authority and their policy-determining roles with classroom teachers. Too many supervisors believe that teachers must be closely supervised in order to prevent them from shirking [p. vi].
>
> [The book's] central thesis is that the kind and the amount of supervision which should be provided depend upon the qualifications of the teaching staff. . . . . self-supervision imposed by a professional group upon itself is far more effective than any other form of supervision [p. v].
>
> [Changes in supervision] will be in the direction of making supervision a co-operative undertaking. The responsibility for the successful inauguration of these changes rests with teachers to at least as great an extent as it does with administrative and supervisory officers [p. vii].

The emphasis on the teacher's responsibility in co-operative school work is most welcome since it is often overlooked when teachers are complaining about non-co-operative administration and supervision. A further emphasis on the responsibility of the teacher-training institution is also wholesome and much needed.

Five units comprise the content, titled as follows: I. "Frame of Reference: Education in a Democratic Society," II. "The Relationship between Teacher Qualifications and Supervision," III. "The Induction and Guidance of Beginning Teachers," IV. "Professional Improvement of Teachers in Service: A Co-operative Enterprise," and V. "The Special Subjects in the Modern School."

The titles clearly indicate that the authors' concept of supervision, while splendidly democratic and co-operative, is limited in scope. No reference whatever is made to aspects other than the improvement of teachers in service. The treatment does not remotely approach coverage of the field of supervision as it operates at present.

Unit I is a sensible, easily read argument for democracy in educational processes. In Unit II, 50 per cent of the space is given to quotations in small

[1] Alonzo F. Myers, Louise M. Kifer, Ruth C. Merry, and Frances Foley, *Co-operative Supervision in the Public Schools*. New York: Prentice-Hall, Inc., 1938. Pp. xviii+340. $2.50.

print, a presentation which retards reading. While the materials quoted are excellent, less quotation and more interpretation and synthesis would have been desirable. Unit III also contains much quoted material but is probably the best treatment, if not the only treatment appearing in a textbook, of the induction of new teachers. A much more adequate bibliography of city school bulletins should have been included. Unit IV discusses the standard techniques in routine fashion and is neither as complete nor as lively as older discussions. Two of the most widely used standard references and a number of minor publications are omitted from the Bibliography. Unit V on the special subjects contains much first-class material. The emphasis on the special supervisor as a consultant is sound and is in line with present theory. There still seems, however, to be an emphasis on subjects as subjects. There is much excellent reference to individual differences and pupil purposes, but the reviewer believes that an excellent opportunity to discuss the special subjects in relation to the unified program was missed.

The volume is not a major contribution to supervision. It is a good treatment of certain aspects of the field. The discussion is not always well balanced although the writing is, in the main, very good. Bibliographies are limited. Exercises and study questions are omitted. The book's chief merits lie in the concrete, specific illustrations in some of the units and in the consistently followed effort to be practical.

W. H. BURTON

University of Southern California

PRACTICAL SUGGESTIONS FOR THE IMPROVEMENT OF THE RURAL SCHOOL.—Until two or three years ago there was a drought in effective literature about the rural school. The stream of publications in the early twenties all but dried up. The years that followed saw much good work and excellent experimentation but little publication. Of late, a number of worth-while volumes have appeared, and among the very best of these is the book under review.[1]

It combines, in extremely practical fashion, the author's intimate experience in various aspects of rural education with the results of her experimentation and study. The procedures suggested have, most of them, been successfully tried out by the author's thirty rural critics of the State Teachers College, Buffalo, New York, where she is director of rural education.

It is important that such a work as Dr. Wofford's be written, for the small rural schools, to the number of perhaps seventy-five thousand or more, will be with us for the length of my predictable future. Low population density, topography, and certain other factors will successfully bar the elimination of the small school as an attendance unit, however large administrative units become.

[1] Kate V. Wofford, *Modern Education in the Small Rural School.* New York: Macmillan Co., 1938. Pp. xiv+582. $2.75.

After an introductory part which sketches the place of the small rural school in our changing rural society, three practical parts of five or six chapters each follow. The first of these deals with the organization of the school for teaching learning and living. It considers program-making, record-keeping, providing for the time that the child spends outside recitations, caring for the exceptional child, individualizing instruction, and organizing the school for democratic living. The second part considers the curriculum, books as tools, buildings and grounds and the use made of them, and modern aids in teaching. The final part is concerned with the community and its agencies and their relation to the school.

Not the least valuable features of the book are the eight appendixes, which under seventeen heads give concrete, tested forms and devices covering everything from report cards to a suggested constitution for a rural-school club and the outline of a simple survey form that the pupils themselves can use for learning about their community and relating the knowledge acquired to their school work.

Modern Education in the Small Rural School can be recommended without reservation as a textbook in undergraduate teachers' colleges and normal schools and as the guide par excellence to the isolated teacher in rural areas who is anxious to improve her work but is uncertain how to proceed.

EDMUND DES. BRUNNER

Teachers College, Columbia University

TEACHING ARITHMETIC FOR INSIGHT AS WELL AS FOR USE.—Teachers in the upper elementary grades will welcome stimulus and information which will help them so to teach arithmetic that it will lose much of its weary mechanical nature and grow into a course in quantitative thinking with concepts which are indispensable to our scientific civilization. In 1927 Robert Lee Morton, of Ohio University, published *Teaching Arithmetic in the Intermediate Grades*. This book was a popular contribution to teaching technique and has had great influence. The present volume[1] is a revision and an enlargement of the earlier book and as such should find many warm friends who will use and enjoy it. Volume I, published in 1937, is a revision and a re-writing of an earlier book for the primary grades.

Prospective teachers of arithmetic, especially in Grades IV, V, and VI, will find this book a complete, carefully written, simply organized, and readily understood textbook filled with scientifically sound methods for organizing and presenting all phases of arithmetic. Teachers of experience will find stimulating ideas that will help them to teach better. Morton claims that "it is designed for teachers, prospective teachers, supervisors, superintendents, and other students of elementary education" (p. v), and the reviewer agrees that all these, and

[1] Robert Lee Morton, *Teaching Arithmetic in the Elementary School:* Vol. II, Intermediate Grades. New York: Silver Burdett Co., 1938. Pp. xii+538. $2.72.

teachers of teachers, and prospective teachers in colleges or normal schools also, will warmly welcome Morton's new book and modern ideas.

Chapter i is an outstanding presentation of the general point of view of "meaningful" teaching of arithmetic in contrast to the drill theory and the theory of incidental learning:

> It [the meaning theory] holds that arithmetic is a system of interrelated principles, that children will become interested in learning it for its own sake as well as for its obvious usefulness, that understanding must come before drill, that new steps must be discovered by pupils rather than merely accepted by them, that drill if not given prematurely has an important function to perform, and that through arithmetic children should learn to do quantitative thinking [pp. 18–19].

The remaining pages of chapter i deal with the following functions of arithmetic instruction: (1) computational, (2) informational, (3) sociological, and (4) psychological. The first two of these four categories are self-explanatory. By the sociological function Morton means the application of arithmetical abilities in practical affairs. Computation and information are useless unless useful. By "psychological function" he means the use of number as a method of thinking. He quotes Judd and Brueckner liberally in defense of this position. For example: "To reduce arithmetic to a few practical applications would be to neglect the general idea of precise thinking on which our mechanical and scientific civilization rests" (p. 31). This viewpoint is the basis for teaching arithmetic for insight, as Morton champions. He concludes that arithmetic which gives "due consideration to the informational, the sociological, and the psychological functions, as well as to the computational function, is an indispensable part of the training of the young" (p. 33).

The remaining chapters of the book are devoted to systematic presentations of the teaching of operations with whole numbers, fractions, decimals, percentage, denominate numbers, mensuration, problem-solving, and use of tests. Each unit is carefully organized into one or more chapters filled with interesting detail.

Morton advocates systematic instruction. In beginning any major unit, whether with whole numbers, fractions, or percentage, he would take an inventory of the child's knowledge and training. Often this inventory-taking is largely an individual matter, since group tests, at best, are really not reliable on finer points. Such preliminary testing enables the teacher to begin "where the pupils are rather than where she thinks they ought to be" (p. 181). Only on such a basis can a teacher develop mathematical insight.

After the inventory, fundamental principles for "teaching, not telling" are presented. This presentation is given with remarkable thoroughness and covers all phases of the subject which an intelligent and informed teacher should know. All recommendations are based on research either by the author or by other experienced investigators. The footnotes show a satisfying familiarity with the literature in the field, as does also the aptly annotated bibliography at the end

of each chapter. As teaching aids there also appear at the end of each chapter a set of "Questions and Review Exercises" and a "Chapter Test," both of which are valuable aids for the reader.

If there is any major adverse criticism of this textbook, it would be that the treatment is so over-scientific as to be a bit cold and lacking in human qualities. One of the major problems confronting many arithmetic teachers is one of developing interest, drive, or, to use a worn-out term, a "felt need." Although heroic and persistent emphasis on understanding and insight makes one feel that this emphasis is really Morton's technique for developing in the child an interest and a desire to learn, one also feels that the book leaves something to be desired on this human, nonscientific aspect of the teaching of arithmetic.

However, for a scientific presentation and a stimulating, well-organized treatment of the teaching of arithmetic, Morton has written a usable and a useful book.

H. C. CHRISTOFFERSON

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PROBLEMS OF ABNORMAL BEHAVIOR.—Many books on the problems of psychopathic behavior have recently been written especially for the purpose of giving the general reader some systematic knowledge of psychopathology. In many instances the authors also attempt to give the lay reader help in reorienting his own behavior. The book under review[1] does not attempt especially to deal with everyday behavior or to make suggestions regarding the reorientation of the reader's difficulties. In the Preface the author states that his purpose is to describe nervous and mental diseases in simple terms and to point out the problems of the "public lunatic," that is, the person who influences others through his own abnormality.

The book of 520 pages is composed of 65 chapters, a short glossary, and an index. The first reaction of the reviewer was a question why the book is divided into so many chapters, some of which are only four pages long (chapter xxxviii) and some less than three (chapter xxxvi). Chapter divisions are supposedly made to facilitate the presentation of different topics, but there is no logical reason for some of the divisions which the author of this book has made. As an example, Part IV deals with traumatic hysteria and is divided into six chapters dealing with the results of encounter with bandits, lightning stroke, electric shock, minor head injuries, major head injuries, and injuries to extremities. In the first place, all these topics could very well have been discussed in one chapter, and, in the second place, the reviewer doubts the wisdom of discussing encounters with bandits or electric shock in such a book. If the author is presenting a description of nervous and mental diseases, as he states in the Preface, it is questionable whether encounter with bandits is a common cause of the

[1] C. S. Bluemel, *The Troubled Mind: A Study of Nervous and Mental Illnesses*. Baltimore: Williams & Wilkins Co., 1938. Pp. x+520. $3.50.

development of nervous or mental diseases. The author might well have written a chapter on "rounding a curve at high speed" or "falling out of a fourth-story window." The author states that "an encounter with holdups or bandits is not altogether an uncommon experience in modern American life" (p. 217). From the reports of police departments the reviewer is inclined to believe that such an encounter is an uncommon experience, that is, in relation to the total number of experiences which each person is likely to have. Furthermore, careful reading of chapters xxxviii and xxxix shows that encounters with bandits, lightning strokes, and electric shock all produce nervousness and a sense of unreality, pains, dizziness, and other symptoms which show no differential between the kinds of traumata and the reactions to them.

From page 359 on, the author discusses mental abnormality. The topics are: illusions, delusions, hallucinations, confusional reactions, senile dementia, paresis, melancholia, paranoia, dementia praecox, mania, infantilism, the psychopath or infantoid, and the public lunatic. These topics are indeed a curious mixture for presentation of the problems of mental abnormality. Many of the chapter headings contain obsolete terms, such as "melancholia," "infantilism," and "psychopath," each of which supposedly signifies some mental disease.

Probably 60 per cent of the content of this book is made up of case studies, which are brief and extremely well presented. The reviewer is somewhat puzzled by the fact that the author makes little attempt to present a co-ordinated and correlated theory of neurotic manifestations or mental disorder but merely presents varying symptoms in a somewhat disconnected fashion. The first chapter gave the reviewer an excellent impression of the book and a hope that the rest of the material would be as carefully written and as interesting. This chapter deals with fixed ideas in the normal mind, and it not only presents interesting material but also raises many questions regarding the meaning of the rigidity of human behavior in everyday activities.

The book is well written, and there is no attempt to dramatize in the newspaper style which is often observed in popular books. Although it is doubtful whether any student will be able to systematize his knowledge in the field by reading this publication, the book will give him a great deal of information and, in this respect, is highly recommended.

MANDEL SHERMAN

University of Chicago

FUNDAMENTALS OF PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS.—Since it is now believed that the child is an organism which learns "all over," the so-called "academic training" of elementary-school teachers, traditionally limited largely to matters of the mind, is quite inadequate. Any attempt, therefore, to assist the already overburdened classroom teacher in the complete education of boys and girls is commendable. By developing an entire program of physical education for Grades I–VI and by applying it in an actual situation, the authors

of the volume under review[1] not only have helped the classroom teacher and the supervisor of physical education but have made a significant contribution to professional education as well.

The authors are concerned with the systematic building of big muscle skills and associated knowledges, attitudes, and appreciations from Grade I to the junior high school. Balance, timing, force, and direction or accuracy are considered the fundamentals which are basic to the control of an object or of the body itself. The book is organized by grade levels. Each grade is divided into units, which, in turn, are made up of a series of lesson plans. Rather specific objectives are established, and the appropriate activities and outcomes are listed. There has been an attempt to give progression in fundamentals within grades and from grade to grade, and, wherever opportunity offers, certain basic health principles have been included in the units.

Many admirable features are noted. In this volume the teacher finds an entire program which has been worked out in detail, not only on paper, but in an actual situation. Here, too, is an attempt to tie together objectives, activities, and outcomes; to integrate health-teaching with the activity program; and to provide the progression which is so badly needed in the newer type of play program. Moreover, the provisions for pupil leadership are commendable.

On the other hand, certain issues are brought out which deserve the best thought and judgment of all concerned, since they are questionable or, perhaps, even objectionable unless thoroughly understood by the teacher. In the first place, *prepared* units and lesson plans may be objectionable if they are followed blindly. Obviously these are intended as *guides*, since they would be too artificial to be adopted wholesale apart from the situation in which they were developed. The teacher, therefore, must use them as guides and draw on his own initiative, imagination, and resourcefulness in adapting them to the local situation. In the second place, some critics even go so far as to question seriously the advisability of teaching the fundamentals of balance, timing, force, and direction, as such, apart from the activities themselves. Other debatable points include: for the lower grades, the preponderance of rhythmic activities, the use of dodge ball and relay races, and the dearth of playground games; for Grades IV–VI, the lack of a wide variety of ball games. Moreover, while some progression in fundamentals and in the activities is noted from grade to grade, it is not easily discernible to the reader.

On the whole, however, these graded lessons in physical education make a valuable contribution in an area which heretofore has been greatly neglected. It will be interesting to learn whether the development of fundamental motor activities in the lower grades will really result, as is hoped, in the successful participation by the children in the more highly organized activities of later grades and years.

[1] Gertrude M. Baker, Florence M. Warnock, and Grace D. Christensen, *Graded Lessons in Fundamentals of Physical Education: A Program for Grades One to Six.* New York: A. S. Barnes & Co., 1938. Pp. x+368. $3.00.

This book is recommended primarily for classroom and rural-school teachers and for supervisors and part-time teachers of physical education in the elementary grades. It will also be helpful to principals and to educators in general who are interested in the complete education of boys and girls.

WILLIAM L. HUGHES

Teachers College, Columbia University

ADDITIONS TO THE NEW HEALTHY LIVING SERIES.—Teachers will welcome the new books for third- and fourth-grade children in the New Healthy Living Series.[1]

The content of the books is well within the range of the experience of children in the intermediate grades. The selection is such that each book provides material for a complete health program which could cover an entire year's work. The books could be used in two ways: as supplementary readers or, better, as references to stimulate interest in the health experiences that can easily be arranged throughout the year. The vocabulary is within the reading ability of the average child in the grade.

While the information comes within the range of the child's experience, the material presented is real information and is scientifically sound. It should strengthen habit formation, but there is no preaching. These books give a scientific basis for desirable habits. The emphasis is positive; illnesses are mentioned, but the treatment throughout the book should develop the pupil's desire for good health rather than create a fear of illness. Growth is emphasized throughout the books. If the pattern of the book is followed, each child will have a wholesome attitude toward his well-being and should have an appreciation of his responsibility for developing a sound body—a realization that is well within his mental maturity.

The questions at the end of each chapter and the suggested activities are excellent. They should prove valuable to the teacher whose preparation for teaching health has been limited and should be suggestive to teachers who are well prepared for this phase of work. It is to be regretted that one deviation from accepted procedure occurs on pages 110 and 111 in *Let's Stay Well*, where the left eye is tested first. This error can easily be corrected in subsequent printings.

These books form a valuable addition to the growing library of health books for children in the intermediate grades.

MARY MAY WYMAN

Public Schools
Louisville, Kentucky

[1] Mary L. Hahn, with the co-operation of Charles-Edward Amory Winslow, *Let's Grow*, pp. vi+186; *Let's Stay Well*, pp. vi+184. New York: Charles E. Merrill Co., 1938. $0.72 each.

SCHOOL-CENTERED READERS.—If the function of school readers is to provide children with reading material arranged in disparate groups having close relation with their intellectual and scholastic life and growth, these are useful books.[1]

They are designed for Grades IV, V, and VI. Each book is made up of six units. The dominant theme in all three books is that best named by the term "social studies": geography, travel, industry, invention, social service, cooperation, and conservation. A few units, however, such as those on hobbies, prose, poetry, and drama, and "Tales from Many Lands," stand somewhat apart from the social theme, though they are certainly not antagonistic to it. Each unit is introduced by a series of pictures (photographs and candid-camera shots) to provide preliminary visualization and interest-whetting discussion. Nearly all the units close with suggestions for things to do and books to read. Throughout the units are drawings, pictures, and maps, most of them incredibly bad—bad from almost every angle.

The books seem to this reviewer to fit pretty well the scholastic interests of the pupils in these three grades, although in his opinion there is much too much emphasis on the social. The units are compact and unified, and the selections within the units are as diversified in content, type, and tone as is consistent with the central idea.

Granted that the purpose of school readers is that stated in the first sentence of this review, these are well-planned books. As in all social planning, however, the final success depends on the individuals within the plan. So in readers—the acid test is the quality of the selections. What does such a test reveal? All the poems (and there is a generous supply of poetry) and a few prose things were taken intact from the work of professional writers, many of them very competent writers. But most of the material was either composed specifically for these books or cut to fit ("adapted" is the euphemism for the procedure) from the writings of others. No harm in that, of course, provided the carpenter work is skilfully done; and, for the most part, that job in these books is pretty well done. The cutting-out of passages from the original, the simplification of vocabulary, and the recasting of sentences—these are the chief means of adapting. This reviewer would assert that each of these, and particularly the third, is an exceedingly difficult task, requiring almost as much discrimination and fine skill as that needed for excellent original writing, and he would assert further that not infrequently the obligations of this work have not been met in these books. He could demonstrate this statement—at least to those who have a feel for good writing—by quoting some passages from the original and then laying alongside the adapted passages.

[1] Child Development Readers: *Exploring New Fields* by Beryl Parker and Julia M. Harris, pp. viii+440, $0.92; *Tales and Travel* by Julia Letheld Hahn, pp. viii+472, $0.96; *Highways and Byways* by Beryl Parker and Paul McKee, pp. vi+504, $1.00. Boston: Houghton Mifflin Co., 1938.

Nevertheless, if it is books of this sort that the schools want, then these three books are clearly "down their alley." The present reviewer prefers books of another sort, not school-centered, not cut to fit, not so overwhelmingly civic-minded. But there are plenty of school readers of that kind, and few of this; and it was books of this kind that the editors set out to build. They have done a good job.

They have, in fact, done a better job than the publishers have. For in binding, in the quality of the paper, in illustrations, and in page makeup, the volumes are singularly unattractive. In these days of good bookmaking this is an unexpected publisher's whim. Perhaps they were desirous of offering cheap books; even so, they would do well to remember that books can be made *cheap* in more senses than one.

WALTER BARNES

New York University

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

BENNETT, CHESTER C. *An Inquiry into the Genesis of Poor Reading.* Teachers College Contributions to Education, No. 755. New York: Teachers College, Columbia University, 1938. Pp. viii+140. $1.60.

BUROS, OSCAR KRISEN (Editor). *The Nineteen Thirty Eight Mental Measurements Yearbook of the School of Education, Rutgers University.* New Brunswick, New Jersey: Rutgers University Press, 1938. Pp. xiv+416. $3.00.

COLCORD, JOANNA C. *Your Community: Its Provision for Health, Education, Safety, and Welfare.* New York: Russell Sage Foundation, 1939. Pp. 250. $0.85.

CURTIS, FRANCIS D. *Investigations of Vocabulary in Textbooks of Science for Secondary Schools.* Boston: Ginn & Co., 1938. Pp. viii+128. $1.40.

DAVIES, JOSEPH EARL. *Fundamentals of Housing Study: A Determination of Factors Basic to an Understanding of American Housing Problems.* Teachers College Contributions to Education, No. 759. New York: Teachers College, Columbia University, 1938. Pp. viii+356. $2.85.

Democracy and the Curriculum: The Life and Program of the American School. Written in collaboration by Harold Rugg, Editor, and Others. Third Yearbook of the John Dewey Society. New York: D. Appleton-Century Co., Inc., 1939. Pp. xiv+536. $2.75.

Education on the Air. Ninth Yearbook of the Institute for Education by Radio. Edited by Josephine H. MacLatchy. Columbus, Ohio: Ohio State University, 1938. Pp. viii+352. $3.00.

FOSTER, CHARLES R., JR. *Editorial Treatment of Education in the American Press.* Harvard Bulletins in Education, No. 21. Cambridge, Massachusetts: Harvard University Press, 1938. Pp. xiv+304. $2.00.

HERBER, HOWARD T. *The Influence of the Public Works Administration on School Building Construction in New York State, 1933–1936.* Teachers College Contributions to Education, No. 762. New York: Teachers College, Columbia University, 1938. Pp. viii+108. $1.60.

HOLT, ANDREW DAVID. *The Struggle for a State System of Public Schools in Tennessee, 1903–1936.* Teachers College Contributions to Education, No. 753. New York: Teachers College, Columbia University, 1938. Pp. xvi+502. $3.85.

JUDD, CHARLES H. *Preparation of School Personnel.* The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xii+152. $1.50.

KANDEL, I. L. *Conflicting Theories of Education.* New York: Macmillan Co., 1938. Pp. xiv+178.

KANGLEY, LUCY. *Poetry Preferences in the Junior High School.* Teachers College Contributions to Education, No. 758. New York: Teachers College, Columbia University, 1938. Pp. xii+154. $1.60.

KUHN, EFFIE GEORGINE. *The Pronunciation of Vowel Sounds: An Evaluation of Practice Material for College Freshmen.* Teachers College Contributions to Education, No. 757. New York: Teachers College, Columbia University, 1938. Pp. vi+86. $1.60.

LAINE, ELIZABETH. *Motion Pictures and Radio: Modern Techniques for Education.* The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., Inc., 1938. Pp. x+166. $1.75.

MCKOWN, HARRY C. *Activities in the Elementary School.* New York: McGraw-Hill Book Co., Inc., 1938. Pp. xx+474. $3.00.

MURRAY, SISTER M. TERESA GERTRUDE. *Vocational Guidance in Catholic Secondary Schools: A Study of Development and Present Status.* Teachers College Contributions to Education, No. 754. New York: Teachers College, Columbia University, 1938. Pp. viii+164. $1.60.

PLUGGÉ, DOMIS E. *History of Greek Play Production in American Colleges and Universities from 1881 to 1936.* Teachers College Contributions to Education, No. 752. New York: Teachers College, Columbia University, 1938. Pp. xii+176. $1.85.

REEVES, F. W., FANSLER, T., and HOULE, C. O. *Adult Education.* The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xvi+172. $2.00.

SPENCER, DOUGLAS. *Fulcra of Conflict: A New Approach to Personality Measurement.* Yonkers-on-Hudson, New York: World Book Co., 1938. Pp. xii+306. $2.40.

v, C.-E. A. *The School Health Program.* The Regents' Inquiry into the ıcter and Cost of Public Education in the State of New York. New York: :aw-Hill Book Co., Inc., 1938. Pp. xiv+120. $1.50.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

NG, MAXIE NAVE, and SANFORD, VERA. *Enriched Teaching of Mathe- s in the Junior and Senior High School.* A Source Book for Teachers of ıematics Listing Chiefly Free and Low Cost Illustrative and Supple- ary Materials. New York: Teachers College, Columbia University, Pp. x+134. $1.75.

PUBLICATIONS IN PAMPHLET FORM

:STER K. *Major Issues in Financing Education in Pennsylvania.* Bulletin 135. Harrisburg, Pennsylvania: State Department of Public Instruc- 1938. Pp. vi+100.

ENNETH S. *Coordinating Councils in California.* Department of Educa- Bulletin No. 11, 1938. Sacramento, California: State Department of ation, 1938. Pp. viii+54.

of Introduction: A Book List for Young People. Compiled by a Joint mittee of the American Library Association and the National Education ciation, Jean Carolyn Roos, Chairman. Chicago: American Library ciation, 1938. Pp. 130. $0.65.

ICKSON, ANDREW. *Adult Education Courses of Study: An Appraisal.* lt Education Group, Occasional Papers on Adult Education, No. 1. York: Teachers College, Columbia University, 1938. Pp. iv+28.).

:T, LYLE WARREN. *A Study of the Status of the Rural High-School Princi- in Kansas.* Kansas State Teachers College of Emporia, Bulletin of In- ıation, Vol. XVIII, No. 10. Studies in Education Number (Sixteenth of Series). Emporia, Kansas: State Teachers College of Emporia, 1938. 28.

ood Are Our Colleges? Public Affairs Pamphlets, No. 26. New York: lic Affairs Committee, Inc. (8 West Fortieth Street), 1938. Pp. 32. $0.10.

IEY, GERTRUDE, with the assistance of CORINNE A. SEEDS, LAVERNA SING, NATALIE WHITE, and DIANA ANDERSON. *A Study of the Pueblo ians.* Developed in Grade III of the University Elementary School of the versity of California at Los Angeles. Department of Education Bulletin 10, 1938. Sacramento, California: State Department of Education, 1938. x+108.

N, BRUCE L., and SMITH, ELNA N. *Rural Youth: Their Situation and spects.* Works Progress Administration, Division of Social Research, Re-

search Monograph XV. Washington: Government Printing Office, 1938. Pp. xx+168.

NATIONAL OCCUPATIONAL CONFERENCE. *An Appraisal and Abstract of Available Literature on: The Occupation of the Blacksmith*, pp. 8; *The Occupation of the Boilermaker*, pp. 8; *The Occupation of the Building Contractor*, pp. 8; *The Occupation of the Patternmaker*, pp. 8; *The Occupation of the Plasterer*, pp. 8; *The Occupation of the Welder*, pp. 10; *The Occupation of the Cabinetmaker*, pp. 10; *The Occupation of the Carpenter*, pp. 8; *The Occupation of the Dental Mechanic*, pp. 8; *Occupations in Music*, pp. 16; *The Occupation of the Nurse*, pp. 12; *The Occupation of the Stenographic Worker*, pp. 12. New York: National Occupational Conference (551 Fifth Avenue), 1938. $0.10 each.

RUSSELL, JOHN DALE, and ASSOCIATES. *Vocational Education.* Prepared for the Advisory Committee on Education, Staff Study No. 8. Washington: Government Printing Office, 1938. Pp. x+326. $0.40.

The School Plant and Equipment. Review of Educational Research, Vol. VIII, No. 4. Washington: American Educational Research Association of the National Education Association, 1938. Pp. 365–492. $1.00.

SKEELS, HAROLD M.; UPDEGRAFF, RUTH; WELLMAN, BETH L.; and WILLIAMS, HAROLD M. *A Study of Environmental Stimulation: An Orphanage Preschool Project.* Studies in Child Welfare. University of Iowa Studies, Vol. XV, No. 4. Iowa City, Iowa: University of Iowa, 1938. Pp. 192.

SMITH, NILA BANTON. *Remedial Instruction in Reading with College Freshmen.* Bulletin of the School of Education, Vol. XV, No. 1. Bloomington, Indiana: Bureau of Co-operative Research, School of Education, Indiana University, 1938. Pp. 36. $0.50.

WELLMAN, BETH L. *The Intelligence of Preschool Children as Measured by the Merrill-Palmer Scale of Performance Tests.* Studies in Child Welfare. University of Iowa Studies, Vol. XV, No. 3. Iowa City, Iowa: University of Iowa, 1938. Pp. 150.

WEST, RUTH (Editor). *Utilization of Community Resources in the Social Studies.* Ninth Yearbook of the National Council for the Social Studies. Cambridge, Massachusetts: National Council for the Social Studies, 1938. Pp. vi+230.

WILLIAMS, R. C. *Type of School District as a Factor in High School Attendance in Iowa.* Research Bulletin No. 23. Des Moines, Iowa: State Department of Public Instruction, 1938. Pp. 86.

UNITED STATES OFFICE OF EDUCATION PUBLICATIONS:

Bulletin No. 6, 1938—*Offerings and Registrations in High-School Subjects, 1933–34* by Carl A. Jessen and Lester B. Herlihy. Pp. vi+96. $0.15.

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Educational News and Editorial Comment

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Are the Colleges Good Shepherds to Their Sheep?

In recent years the American college has been the subject of much vigorous discussion and pointed criticism. Its traditional goals have been challenged, many persons are discontented with its program of instruction, and its structural organization is undergoing a fundamental reorganization. To the most casual observer, higher education in this country is seen to be in a process of transformation; it is being torn from its old moorings; it is striving to attain orientation amidst the shifting currents of American life.

The college originated in a society characterized by sharp class distinctions, and for centuries it served primarily the interests of the directive classes. Nor did it lose its aristocratic traditions when it was transplanted to American soil. The founders of Harvard College were not unmindful of the fact that it could be used as an instrument of social control, and at a later date New England merchants and southern planters were willing to join the clergy in the support of a system of higher education which would contribute to the continuance of the existing order. So long as the essential purpose of the college was the pre-professional preparation of a select group of young men to enter one or another of the professions or the training of a few leaders for industry and commerce, the organization of

the content of instruction presented no great difficulty. For many years, however, the old pattern of the college has been undergoing modification as a result of a new order of things; there is no longer any commonly accepted concept of the function of the college or of the precise means by which its ends may be accomplished. The old mold has been broken by the change of attitude toward mental discipline, by the vast accumulation of new knowledge, and, most of all, by the needs and the interests of the new constituency which economic and social change has thrust into college classrooms.

Of the forces that beat upon the college from without and multiply its perplexities, two are of outstanding importance. The first of these is the democratization of higher education. It is an amazing fact that in 1930 enrolments in the collegiate departments of universities, colleges, professional schools, and junior colleges were more than eleven times as great as the enrolments in these institutions in 1890. More students were enrolled in these collegiate departments in 1930 than were in attendance in secondary schools in 1900. Social forces playing upon the college from without, forces over which presidents and deans have no immediate nor direct control, are thrusting into college classrooms an increasing stream of young men and women with almost every conceivable cultural background, with varying interests and capacities, and with expectations of engaging in all the types of activities in which people engage in their mature years. This new constituency constitutes a challenge to the American college. This challenge will not be met by the administration of a "liberal education" which has not lost entirely its aristocratic hallmarks and which is still rather much a pre-professional program.

The second force beating upon the college from without and requiring reconsideration of its goals is the changing nature of the world that youth must face. The contract which successful living makes with youth today contains important new specifications: it requires new qualities of intelligence and of personality; it demands a wider grasp of the essential elements of human experience; and, above all, it requires qualities of adjustment and adaptation. The impact of invention and technology on our economy is forcing a reconstruction of many, if not most, of our institutional forms. The democratic

state, if it is to survive in the modern world, must cultivate the spirit of political experiment, invention, and contrivance. To participate wisely in the determination of public policy today requires a social insight far deeper than that required to direct the destinies of a simple rural economy such as ours was a generation or two ago. Nor is the need for experiment and invention any less in the area of economics than in the area of politics. In the whole area of human relations, whether of government, economy, or ethics, we are faced with the necessity of adaptation and adjustment. If the youth of this and the next generation are to meet their responsibility for the successful operation of the national economy, for improving the quality of individual living, and for advancing the level of the common culture, they will have to cultivate a greater breadth and comprehensiveness of thought than is usually found in the college today.

For many years to come, the college will be striving for a new orientation, and, as new plan follows new plan in the process of experimentation, there will be much uncertainty and not a little confusion. In the meantime what will happen to the students? Will a large percentage of them be caught between the upper and the lower millstones of the old and the new order of things? Or will the colleges be able to work out an adequate program of guidance and adopt policies designed to safeguard human values?

In this connection a report prepared by Everett W. Lord, dean of the College of Business Administration of Boston University, is of particular interest. The report was prepared for Alpha Kappa Psi Fraternity and is entitled "Student Persistence in American Colleges." The data presented in the report were drawn from 266 colleges throughout the United States.

They raise pointedly the question whether the colleges are properly meeting their responsibility to the young men and women whom they permit to enrol as students. The major conclusions reached by Dean Lord are quoted in the following paragraphs.

Nearly half of the students admitted to colleges in the United States fail to complete the course: that is, of approximately 300,000 annually beginning a college course, about 60,000 drop out in or at the end of their Freshman year; 44,000 the second year; 15,000 the third year; and 19,000 in the fourth year. Making allowance for the small number who are allowed to return or who succeed in gaining entrance to another college and completing a course there, it is

safe to say that at least 130,000 end their advanced studies before completing the prescribed course.

It is reasonable to suppose that three years, or two, or even one year of college may be beneficial, although for that large percentage who have failed to measure up to college standards the benefit may be questionable. The 25,000 actually dismissed and the probably equal number discouraged by scholastic difficulties may well be worse off for having begun and failed. Few of them can enter another school, and they are not wanted by employers. They have learned to distrust their own abilities. Their plight is deplorable, even when they are wholly at fault for it—when the failure is due to neglect of work rather than to lack of ability. But in a vast number of cases, the college is at fault. The student should not have been admitted in the first place; once admitted, he should have had wiser and more efficient guidance. This is a responsibility which the college has no right to shirk.

For the thousands who withdraw because of financial difficulties there need be less concern. These young people are likely to have profited by as much of the college course as they have taken, and they have no onus of failure to overcome. They may be able to return later, or to go to another college, and their record is no bar to desirable employment. Yet for them, too, the college has a responsibility which is not always recognized. Perhaps they can be helped with programs of study not requiring class attendance, but supervised by the college: perhaps they can be directed to inexpensive courses of study or given substantial reading courses. Certainly they should be regarded as alumni of the college, and assured of its continued interest in their welfare.

The size of the college has little bearing upon the mortality of the student body: but in the larger colleges a student is more likely to be dropped after more than three years of attendance.

Not all our colleges have adequate records of their student body. It is not enough to know only the grades that students have received: there should be records of a more personal nature, a closer relationship between the college and the student, a warmer feeling of sympathy for the young people who look to the college as a real Alma Mater. Only when this attitude can be maintained can the present loss to society be reduced to a minimum, and the weakening of moral fiber of thousands of our ambitious young people be prevented.

The good shepherd cannot be satisfied with the ninety-nine who are safe in the fold: he must seek the one who is lost.

Labor's Attitude toward Federal Aid to Education

In a recent issue of the *American Federationist*, the official journal of the American Federation of Labor, William Green makes the following statement with respect to the attitude of the federation toward federal aid to education.

More than a century ago our nation declared for a public-school system. Organized labor was a leader in that movement. Workers of that day wanted equal educational opportunities for their children who were to become the voters of the next decades. Organized labor is again at the head of a movement to provide the means to make possible equal educational opportunities for all in conformity with the best standards.

As a nation we have to think of our citizens as a whole not as citizens of the several states. Workers move freely from one state to another following their jobs or seeking employment. No state or section can be sure of a uniformly educated citizenry unless there is uniformity of opportunity throughout the nation. Federal allotments to states where low local incomes have deprived children of educational opportunities equal to those of more prosperous states, are essential for assuring anything like real equality of educational opportunity as a basis for democratic government and way of life.

A legislative proposal for this purpose was introduced in the last session of Congress and will be considered in the coming session. This measure follows recommendations of the President's Advisory Committee on Education which came into being as a result of labor's demands. Mistakes and abuses with respect to vocational education roused our indignation to petition for redress. The result was an Advisory Committee on Vocational Education which found it impossible to make recommendations with regard to that field without considering all of education. The President widened the scope of the committee's inquiry and made it responsible for recommendations for the whole field. In the main, labor concurs in the committee's findings and in sponsoring the bill to put them into effect. . . . .

Labor believes federal aid to state educational plans is the most important move toward real equality of educational opportunity for all.

A Program for the Improvement of Teaching

The Commission on Teacher Education, established early in 1938 by the American Council on Education, will devote its energies and resources to the improvement of teaching in the schools of the nation. According to announced plans, all aspects of teacher education will be studied, and attention will be paid to the continued education of teachers on the job as well as to the preparation of teachers. Nation-wide co-operation of various types of higher institutions preparing teachers, of state officers of education and local school authorities, and of leading educational associations will be stressed. Fifteen collegiate institutions and fifteen school systems will be invited within the next few months to work especially closely with the commission. These groups will be asked, and helped, to

experiment vigorously according to their own plans and to collect and report evidence of the results of such experiments. The General Education Board has made available $320,000 to carry out this phase of the commission's work.

Karl W. Bigelow, director of the Commission on Teacher Education, has made the following statement with regard to the commission's plans.

The Commission on Teacher Education believes that the educational experiences to be provided for teachers, both during and after the period of their professional preparation, should be planned with due regard for all their needs. This view points in the direction of functional programs, in which elements of general and of professional education are integrated. But the problems as they actually present themselves—problems of selection and of guidance, as well as of curriculum-making—vary from situation to situation; moreover, the knowledge which is possessed regarding these problems is still imperfect. The commission takes the position, consequently, that it can best perform its function by encouraging those groups actually working with teachers in making the completest possible use of the best that is now known regarding teacher education and in experimenting intelligently on the basis of new and promising hypotheses. It will offer opportunities for the sharing of experiences and for the obtaining of expert counsel, and will seek to facilitate the efforts of various faculties and school groups to evaluate the effectiveness of their programs. It expects, however, that those programs will exhibit considerable diversity.

The fundamental purpose of the Commission on Teacher Education is, of course, to contribute to the improvement of teacher education everywhere in the United States. We hope, therefore, in carrying forward this project to be of wide service and to command the interest and support of national educational associations, state and local educational authorities, and lay groups throughout the nation. We believe that, by clearing significant information and in other ways, we can be of service to teachers' colleges, schools and colleges of education, liberal-arts colleges educating teachers, and school groups everywhere. In order to use the funds at our disposal most efficiently, however, we propose to work especially closely with a necessarily limited number of school systems and of collegiate institutions where teachers are being educated. Members of this group will be selected during the next four or five months. They will be nationally distributed, will vary as to type, and, it is expected, will be outstanding in vitality and in desire to experiment boldly. The commission will undertake to provide their representatives with opportunities for the stimulating interchange of ideas and will try to find other ways of aiding them in their efforts to appraise their problems, define their objectives, improve their programs, and test their results. It is anticipated that the activities of the cooperating colleges and school systems will be watched with deep interest by all

those concerned with teacher education, and that widely significant findings will result from their participating in the study.

One problem to which the commission has already determined to pay a good deal of attention is that of making more effectively available, for use in the education of teachers, the latest knowledge regarding the growth and development of children and adolescents. Teachers clearly need to know as much as possible about the physical, mental, and emotional aspects of growing up. There has been a great deal of important research in this area recently, and the commission is persuaded that those responsible for the education of teachers will welcome help in speeding up the process whereby the results of this research may be put to work. Daniel A. Prescott, professor of education at Rutgers University, has been put in charge of this part of the commission's program.

Education in Chile

Many factors are operative in the world today which make it highly desirable that the people of the United States cultivate a better understanding of the people of the Latin-American countries. For that reason we are quoting the following short but very clear description of certain phases of education in Chile. The statement was prepared by Esther Allen Gaw, dean of women at Ohio State University. It is quoted from the *News Bulletin* of the Institute of International Education.

In the matter of education in Chile, as elsewhere, the first question is, "Who is to be educated?" The answer is that racially there were after the Spanish conquest two original components of the present rather homogeneous population. These were the hardy Basques and the equally hardy Araucanian Indians. Some of the Spanish intermarried only with Spanish so that there is now a very limited population of almost pure Spanish lineage. Many Araucanians remained isolated and are found in relatively pure racial groups. Neither of these nor the other Indian tribes of the South constitute a very large proportion of the total population.

Since there was much intermarriage, the great part of the Chilean population until recent years was a relatively homogeneous population. In recent years there has been English, German, Italian, and some oriental and North American immigration, which is being absorbed without much effort, while making contribution to the national cultural background. Wilhelm Mann has by means of psychological tests made some investigations of the relative innate intellectual ability of those of Spanish and of Indian descent. His findings confirm other comparative investigations which show that there is no innate difference between races as such. During the past half-century Chile has rapidly developed a middle class eager for democratic opportunities. Especially during

the past ten years discriminating laws have been modified, and universal education is being attempted for all children of whatever birth. It is one thing to say that there shall be universal education and another to invent it, as any democracy knows. But Chile is making a valiant attempt to produce teachers enough and school plants enough so that in a few generations each child will have some formal schooling. In the period from 1920 to 1930 the percentage of illiteracy among children of school age was reduced from 37 per cent to 25 per cent of the total school population.

The second question to be answered is, "In what communities are the children?" There are few large cities in Chile. The people live for the most part in small villages or in the country. There are some large haciendas. Those making plans for education realize that its form and manner and content should be adapted to the needs of the children of the particular community. The group of teachers whom I met at the summer session of the University of Chile were earnestly occupied in planning the teaching so that it would be child-centered, not teacher-centered. The Chilean system of education is consciously trying to give each child an education to fit him for life, even at the same moment when the earnest endeavor of that administration is to see that each child goes to school for at least six years.

The system itself is divided into three parts very much like ours. The primary school course lasts for six years, the secondary school for another six years, then at the top the university or some of the institutes for special professions or the normal schools offer education for another four or six years. The secondary school, called *liceo* if it is a government school, or *colegio* if it is a private school, is roughly comparable to our junior college. Graduates of the secondary school may take examinations which, if passed successfully, admit to the university and also give a Bachelor's degree. The secondary schools also admit to the normal schools and many technical professional schools.

Primary and secondary schools are sometimes coeducational; the government universities, and normal schools and institutes are all coeducational. I do not know whether women are accepted in the Catholic universities, of which there are a number in Chile. A few women who wish to prepare for some profession such as law or medicine study at the university. The many who wish to become teachers enter the normal schools instead.

The University of Chile, a government institution, is excellent; many believe that it is the best in South America. North American physicians who visited the Medical School at a recent congress and who saw the laboratories and clinics report that it can take its place with A-grade medical schools in the United States.

Closely associated with formal education are various forms of adult education. The University has extension courses, the trade unions have organized classes for self-education, women's clubs have done the same, and the government plan of rural education includes the teaching of adults. Another form of

adult education comes through scientific societies, museums, and allied activities. There are national museums in the larger cities of Santiago, Valparaiso, and Concepción. There are two astronomical observatories in Santiago. There are academies and societies of language, history, geography, natural sciences, and entomology, to mention a few. There are various institutes connected with medicine and public health. These societies not only inform their members but have great influence in determining the content of educational material.

There are in existence a number of experimental schools definitely trying to solve the problem of the form and content of schooling in Chile. I visited such a primary school and such a secondary school in the city of Santiago, and understand that others are working the same way in the rural communities. The Chilean teachers know that there is poverty and ignorance; they also know that wise education is the only way to solve these problems.

Materials for Improvement of the Curriculum

The state departments of education in Alabama and Maryland have recently published bulletins which should be valuable to teachers, not only in these two states, but in other states as well. The title of the bulletin published in Alabama is *A Guide to the Improvement of the Curriculum*. Its general scope and purpose is indicated by the following quotation from the Foreword.

It seems now quite clear that fundamental changes must be made in our schools if they are to meet present demands. The curriculum must be organized about life-situations rather than about organized subject matter as such. Subject matter, the available race experience in all forms, must be made useful in school as in life elsewhere. The school must give a larger place to realities; it must develop in youth, through actual experience, greater initiative, greater willingness to accept responsibility and to face reality; greater powers of leadership, of organization, and of dealing with problems on the basis of data and objective interpretation. The curriculum must provide for individual pupils, as well as groups, upon the basis of inborn capacities, background of experience, present needs, and predictable future needs. Democracy, respect for personality, tolerance, freedom of expression, and group co-operation; the practices of healthful living, wholesome recreation, and the enjoyment of beauty—all of these elements of wholesome living—must be inherent in the school life.

This bulletin . . . . has been prepared for the purpose of helping teachers to plan and effect improvements in the directions indicated by the preceding paragraph. For those who would take definite steps toward a better program, it sets out a number of specific ways to do so. Such suggested steps include the study of children; study of the community life; the development of wholesome school life; greater participation by pupils in planning the school program; the

selection of learning units on the basis of children's needs; and the teaching of the fundamental skills in vital relationship to the other phases of the school program.

A large part of this bulletin is devoted to a presentation of illustrative units.

The Maryland bulletin is entitled *Curriculum Materials in the Social Studies for the Intermediate Grades.* Its general purpose is described as follows:

> The purpose of this bulletin is to present to the teachers and supervisors of the intermediate grades a philosophy of social studies through which they can bring together into closer relationships the instructional materials of their curriculums in history, geography, literature, civics, and health. It makes an attempt to interpret the thirteenth report of the Commission on the Social Studies, *Curriculum-making in the Social Studies* by Marshall and Goetz. It presents some concrete illustrations and suggestions for interpreting and applying this larger background of understanding of social experiences in classroom situations on the level of the child of the fourth, fifth, and sixth grades.

The first section of the bulletin is entitled "Some Suggestions for Interpreting the Social Processes in Terms of Curriculum Materials and Teaching Procedures." In the second section curriculum materials are analyzed "on the basis of the operational aspects of group living."

Useful Guides to the Study of the Community

If the work of the school is to be realistically functional, it must be tied into the life of the community at many points. Those who shape the educational policies of any given area need to know a great deal about the social conditions in the area, about the social agencies other than schools which are in some way prepared to serve children and youth, about the numbers and the kinds of jobs open to young people, about the composition and the growth of the population, about health conditions and facilities, and about numerous other matters of similar import.

Two recent publications are designed for use as guides by groups of persons desirous of gaining factual information about community conditions. The first of these, by Joanna C. Colcord, is published by the Russell Sage Foundation under the title *Your Community—Its Provision for Health, Education, Safety, and Welfare.* It suggests the type of information that might be assembled and studied in

order to supply a background from which the problem of improving the public services of the community may be attacked. Perhaps the volume will render its greatest service as a guide to sources of information. Under each topic suggested for investigation, reference is made to the readily available source materials, both in local and federal documents. The following brief quotation from the section dealing with wages is illustrative of the whole book.

> Wage rates in various occupations are only one factor in the adequacy of family earnings. Others equally important are continuity of employment, size of family, and number of gainfully employed people per family. The volume of the 1930 census reports on families gives some information on the latter points. . . . .
>
> Prevailing wage rates per hour in certain occupations are usually easy to obtain from state departments of labor, but may be published only for the state as a whole. The *Monthly Labor Review* contains annually a statement of "entrance rates" of common laborers into industry. Rates are given, by states, with differences indicated by size of city, by race, and in some instances by type of industry. Some state departments also report on average weekly earnings. In connection with this and the following section, we recommend study of *Employment Statistics for the United States* by Ralph G. Hurlin and W. A. Berridge.

The general scope of the content of the volume may be gained from some of the chapter headings: "Community Setting, Founding, and Development," "Local Government," "Provision for Dealing with Crime," "Provision for Public Safety," "Workers, Wages, and Conditions of Employment," "Provision for Health Care," "Provision for the Handicapped," "Educational Resources," "Opportunities for Recreation," and "Religious Agencies." We commend this volume to the attention of all who are interested in making a survey of a community. It may be secured from the Russell Sage Foundation, New York City, for the price of eighty-five cents.

The second publication is more limited in its scope and purpose. It is a bulletin of the American Council on Education and bears the title *How To Make a Community Youth Survey*. The bulletin, which was written by M. M. Chambers and Howard M. Bell, gives specific and detailed directions with respect to the procedures to be followed in setting up a survey, in conducting it, and in presenting the results. This publication may be procured from the American Council on Education, Washington, D.C., for twenty-five cents.

A Pattern for Organizing the Social-Studies Curriculum in the Elementary School

A wide difference of opinion exists with respect to the best means of implementing the social-studies program at the elementary-school level. In many places experimentation is going on in attempts to develop a satisfactory program, and in time, no doubt, experience will indicate with some precision the best practices to be followed. In the meantime all persons should keep an open mind and keep informed as well about what is taking place in the main centers of experimentation.

In a recent issue of the *Curriculum Journal*, Leo B. Baisden, assistant superintendent of schools, and E. P. O'Reilly, principal of the William Land Elementary School, Sacramento, California, state the case for the underlying philosophy of the Sacramento program.

In developing the Sacramento course of study over a period of several years, an attempt has been made to recognize the importance of both the social functions and the geographic and historic factors which have played so large a part in the development of our present institutions. This has not been done as a mere compromise between two conflicting viewpoints. It is a reflection rather of the conviction that both phases are essential for complete understanding. The philosophy underlying the course has been that we should seek to provide children *constant experience in dealing with social and economic facts on a functional level;* should help them to *understand and interpret the major social and economic functions of society;* should give them the *constant experience of effective participation in a democratic society;* should help them toward the goal of intelligent and sympathetic *world-citizenship*. The difficult problem is to organize a course which recognizes adequately in practice all of these phases.

The Sacramento course might be described as having essentially a *geographic sequence* and a *social functions scope*. The emphasis is on experience, understanding, and utilization of facts rather than facts as ends in themselves. The areas which form the basis of the course begin in the primary grades with the immediate and familiar and proceed to the more distant and remote—that is, from the home and community to the city and its surrounding area, to the state and its environs, to the nation, and to the world at large. The nation, the world, and all other phases of the enlarged environment are treated as an extension of the child's present environment.

The question has sometimes been asked why a sequence based on community, state, and national life was adopted rather than one based on such social functions as communication, the production of goods, etc. The decision involves questions which are at best largely a matter of opinion and judgment. It was the opinion of our committees that in many ways it is easier for children

to relate such functions as transportation and housing to existing institutions of community, state, and national life than it is for them to reverse the process and try to relate all of the factors of city, state, and national life to these functions. While a state or national boundary may be only an imaginary line, it is nevertheless one of the most potent realities in the world. The legal rights and privileges of an individual living on one side of a clump of sagebrush may be vastly different from those of another individual who happens to live on the opposite side of the clump, but across a state or national boundary. Some schools, in attempting to escape from the toils of the conventional curriculum, appear to regard it as a pedagogic crime to study the history of a state, a nation, or a people, but will spend days on the history of transportation or of some manufacturing process. The philosophy underlying the Sacramento course is that the significance of all of these things is in terms of the pupil's understanding of present-day life. If a brief study of the history of Italy will give a more intelligent basis for understanding present-day Italy, he should study Italian history; if the history of an industrial process will aid in understanding and interpreting the social significance of the process, that, too, becomes the basis for a worthy unit of work. There seems to be no valid reason for assuming that there is any essential conflict between these two approaches.

The Junior Scholastic Aptitude Test

For some years the Bureau of Research of the Secondary Education Board has been conducting experimental work with the view of developing a scholastic-aptitude test for use in Grades VII, VIII, and IX. Funds with which to carry on the experimental work were provided by the Carnegie Corporation. This test is designed to serve a function as an entrance to high school similar to that served by the Aptitude Test of the College Entrance Examination Board for entrance to college. In a brochure issued by the Secondary Education Board, the purpose of the test is described more specifically as follows:

The purpose of the Secondary Education Board, when in 1934 it began to plan the construction of the Junior Scholastic Aptitude Test, was to provide an instrument of educational guidance at the eighth-grade level similar to the Scholastic Aptitude Test proper, and, if possible, as useful and as effective. It wished to create for use in the junior high school a means of arriving at a clearer estimate of the most profitable scholastic activities for the ensuing three or four years in the case of each individual student. Elementary schools and secondary schools which were members of the Secondary Education Board felt that they needed such a tool for purposes of transfer from one school to another, for admission to the high school, for placement in the high school, and for promotion.

The test may be procured from the Educational Records Bureau, 437 West Fifty-ninth Street, New York City.

Guide to the Study of the Personality of Pupils

School principals and teachers are becoming increasingly sensitive to the need of a more thorough understanding of the personality development of their pupils. Within the past decade or so, a great deal of effort has gone into devising means of measuring personality, but as yet no wholly satisfactory instruments have been developed. A number of leaders in educational measurement have found the anecdotal record extremely valuable, especially as a supplement to test scores. This type of recording procedure has been defined as follows: "The anecdotal record is a specialized form of incidental observation. It is a description of the child's conduct and personality in terms of frequent, brief, concrete observations of the pupil made and recorded by the teacher."

A recent publication of the Educational Records Bureau on *The Nature and Use of Anecdotal Records*, written by Arthur E. Traxler, should be particularly helpful to teachers and administrators who are interested in this method of personality study. The materials in this bulletin are organized under the following major topics: "Need for Anecdotal Records," "Origin and Definition," "Characteristics of a Good Anecdote," "Situations in Which the Anecdotal Method Is Applicable," "Steps in an Anecdotal Record Plan," "Limitations and Cautions in the Preparation of Anecdotes," "Values and Uses of Anecdotal Records," "Relation of Anecdotal Records to Personality Rating and Behavior Descriptions," "Sample Anecdotes," "Summary," and "Bibliography."

The bulletin lists the following uses and values of anecdotal records which have been called especially noteworthy by writers of published articles on the subject.

1. Anecdotal records provide a variety of descriptions concerning the unconstrained behavior of pupils in diverse situations and thus contribute to an understanding of the core or basic personality pattern of each individual and of the changes in pattern.

2. They substitute specific and exact descriptions of personality for vague generalizations.

3. They direct the attention of teachers away from subject matter and class groups and toward individual pupils.

4. They stimulate teachers to use records and to contribute to them.

5. They relieve individual teachers of the responsibility of making trait ratings and provide a basis for composite ratings. Moreover, they provide a continuous record while trait ratings are usually made only at certain points in a pupil's school experience.

6. They encourage teacher interest in, and understanding of, the larger school problems that are indicated by an accumulation of anecdotes.

7. They provide the information which the counselor needs to control the conferences with individual pupils. An appropriate starting point for each conference can be found in the data, and the discussion can be kept close to the pupil's needs.

8. They provide data for pupils to use in self-appraisal. While in some cases the anecdotes should not be shown to the pupils, each pupil can profitably study the indications in many of the anecdotes about him in order to decide what he needs to do to improve.

9. Personal relationships between the pupil and the counselor are improved by anecdotal records, for these records show the pupil that the counselor is acquainted with his problems.

10. Anecdotal records aid in the formulation of individual help programs and encourage active pupil participation in remedial work.

11. They show needs for the formation of better work and study habits and also provide encouraging evidence of growth in these respects.

12. Curriculum construction, modification, and emphasis may be improved through reference to the whole volume of anecdotal record material collected by a school. The anecdotes indicate where there should be general presentation of material in character development to satisfy the needs of the whole school community.

13. An appropriate summary of anecdotes is valuable for forwarding with a pupil when he is promoted to another school.

14. Anecdotal records may be used by new members of the staff in acquainting themselves with the student body.

15. The qualitative statements contained in anecdotal records supplement and assist in the interpretation of quantitative data.

16. Collections of anecdotal records may provide the necessary validating evidence for various evaluating instruments. For instance, when the results of the Bernreuter Personality Inventory indicate that certain pupils are high in dominance and others are low, the anecdotal record material for these pupils may be analyzed to find out whether or not the Bernreuter scores agree with the observations of behavior.

17. Anecdotal records aid in clinical service. When pupils are referred to clinical workers for special study of their problems, there is great advantage in

having anecdotal records available for these highly trained workers to interpret. In this connection, Charters ("A Character Development Study," *Personnel Journal*, XII [August, 1933], 119–23) makes the following significant observation concerning the anecdotal records of the Rochester Athenaeum and Mechanics Institute: "How penetrating the accumulated emphasis of these anecdotes is was put to a test recently when a psychiatrist came to the faculty for information about a student of the class of 1933 who had been brought to him as a mild case for observation. As he and the supervisor exchanged impressions it appeared that the psychiatrist had uncovered no characteristics that were not already recorded among the anecdotes."

Who's Who for March

The authors of articles in the current issue Arthur I. Gates, professor of education at Teachers College, Columbia University. Carleton Washburne, superintendent of schools at Winnetka, Illinois. Knute O. Broady, professor of school administration at the University of Nebraska. Maurice L. Risen, teacher of social studies and director of forums at Cooke Junior High School, Philadelphia, Pennsylvania. O. L. Harvey, engaged in research in Washington, D.C. Florence L. Goodenough, research professor of the Institute of Child Welfare at the University of Minnesota.

The writers of reviews in the current issue Willard W. Beatty, director of education in the United States Office of Indian Affairs. J. Wayne Wrightstone, assistant professor and research associate in the Bureau of Educational Research at Ohio State University; associate director of the Evaluation of School Broadcasts. E. R. Carson, director of the compulsory attendance department in the public schools of Pittsburgh, Pennsylvania. Franklin Bobbitt, professor of education at the University of Chicago. C. T. Gray, professor of educational psychology at the University of Texas. Virgil Stinebaugh, assistant superintendent in charge of junior high schools and curriculum studies in the public schools of Indianapolis, Indiana.

AN EXPERIMENTAL EVALUATION OF READING-READINESS TESTS

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*

ANOTHER report[1] will give the results of an extensive study of more than a hundred tests, examinations, and ratings of reading readiness. That study, confirmed by an extended investigation in the Horace Mann School,[2] showed that the best predictions of reading progress were made by tests of reading attainments. At the time of entering school, children have already acquired a variety of types of information and skill which represent stages in progress toward reading, even if they cannot read a word, and which are directly used in further reading progress. The first study revealed a mass of data concerning the merits and the defects of practically all types of tests heretofore used. The present study was designed to carry forward the analysis and to reveal the battery of tests which will be most useful early in Grade I.

DESCRIPTION OF THE TESTS USED

The following tests, printed on sheets eight and one-half by eleven inches in size, were used in this study.

Test 1. Picture Interpretation and Directions Test.—This test employs two pictures, a farm scene and a town scene. The latter shows a railroad station and various buildings, automobiles, etc., typical of a small-town square. The examiner reads orally a series of statements, dealing with objects and situations in the picture, together with directions to mark the objects with crosses, circles, etc. For each picture a series of such exercises, varying from easy to hard, is provided.

This test is a composite type which measures in various degrees a number of abilities, including the following: (1) ability to attend to

[1] A. I. Gates, G. L. Bond, and D. Russell, *Methods of Determining Reading Readiness* (a monograph to be published in 1939 by Teachers College, Columbia University).

[2] A brief report of results is given in Frank T. Wilson and Agnes Burke, "Reading Readiness in a Progressive School," *Teachers College Record*, XXXVIII (April, 1937), 565–80.

and understand things said by the teacher, (2) ability to keep in mind what has been said, (3) ability to carry out directions of increasing complexity, (4) ability to interpret and to locate items in an illustration, (5) knowledge of words and concepts in each of two different areas—the farm and the village, (6) ability to sustain attention in an activity similar in length to an ordinary schoolroom session. The words and concepts used in the test are drawn from preprimer and primer materials.

Test 2. Word-matching Test.—This test consists of a page of boxes, in each of which appear four words forming a hollow square. Two of the four are identical; the pupil is asked to draw a line between these two.

Familiarity with words used in the test, or similar words, experience in looking correctly at words, knowledge of the direction in which words are to be perceived, and other features of word perception, as well as word knowledge, would reveal themselves in this test. It is a special type of a general form of test found in an earlier study to be among the best for predicting reading ability.

Test 3. Word-Card Recognition Test.—Test 3 is somewhat similar to Test 2, except that psychologically important differences appear. In Test 3 the pupil has in a box on his paper a line of four words. The examiner for five seconds "flashes" a large card bearing one of these four words in print-like characters. As soon as the card is removed from sight, the child looks at his four words and draws a line around the one identical with the word flashed.

This test is designed to reveal ability to see the word in larger size at a distance, as he would in noting words on the bulletin board, etc., and then to remember it and identify it in typical primer form. All the words on the test sheet are taken from the preprimer or primer materials.

Test 4. Rhyming Test.—Test 4 is a test of ability to give rhymes. It is easier than the rhyming tests used in our earlier studies and therefore enables children to score who failed on the more difficult tests. In this test the pupil is given a picture clue to the rhyming word. The pupil has before him a page containing seven rows of four pictures each. The examiner names the simple objects or actions pictured, such as *box, pin, coat, fan,* and then says "thin" asking the pupil to mark the picture the name of which sounds most like "thin."

The test measures the extent to which a pupil has become acquainted with word-sound elements as the result of oral play with words, of rhyming games, and of hearing, saying, and making up jingles, etc.

Test 5. Blending Test.—This test also reveals much about a pupil's ability to sense and to deal with the sounds of words. The examiner gives the word sounds one at a time with a slight pause between them, and the game is to "guess" what the word is. The child marks the picture on a page to indicate the word that he has chosen.

Test 6. Ability To Read the Letters of the Alphabet.—This test was found to be one of the best indicators of ability to learn to read in the Horace Mann School. It was not as useful in the public schools of New York largely because so many pupils obtained zero or near-zero scores near the beginning of the year. Since the test is simple to give, and since it is a good thing to know which children do and which do not know the letters, use was made of this test in this study for the purpose of determining its value in another situation. The test consists simply in showing the twenty-six letters (1) in lower case and (2) in capitals, in mixed order, and asking the pupil to name them.

Test 7. Sounding the Letters.—This test consists in showing the pupil letters of the alphabet one at a time and asking him not to name the letter but to give the sound which the letter makes. It is a test, in other words, to determine whether the pupil has had some experience in playing with sounds or telling the sounds which different letters stand for. This test was very useful in Horace Mann School, in which the pupils, for the most part, have had a great deal of experience in working with letter picture-books and in play with words and word sounds, and the like, but it was too difficult for most pupils in the New York City schools previously studied. The test was repeated to yield further data concerning its value.

THE SCHOOLS AND THE TESTING PROGRAM

These tests were given in the third and fourth weeks of school to all the pupils entering Grade I in a small city in Connecticut. The people and the school of this city are believed to be typical of American communities. The school children show a typical distribution of intelligence, and the city has a typical variety of social-economic sections. Classes in nine different schools were studied.

The tests were administered and scored by two experienced examiners, Dr. Eva Bond and Mr. Elden Bond.

Reading progress was measured at the end of the term by administering four tests: (1) Gates Primary Reading Test, Type 1, Word Recognition; (2) Gates Primary Reading Test, Type 2, Sentence Reading; (3) a test similar in character to the Gates test, Type 1, but composed entirely of words found in the reading books used by all classes during the term; and (4) a test of reading sentences restricted to the words studied by the pupils. From these tests three scores were obtained: (*a*) total reading score—the total raw scores of four tests; (*b*) total sentence-reading score—the total of Tests 2 and 4; and (*c*) total word recognition—the total of Tests 1 and 3.

In the city in which the study was made, teachers were free to adopt, with only a few general restrictions, the type of teaching program that they preferred. Since the procedures differed appreciably among the classes used in the study, it was possible to determine, more exactly than in the previous study, the influence of the method of teaching on the predictive value of the several tests.

In the preceding study it was found that correlations between tests given soon after the pupils entered school and achievement measured at the end of the second term were appreciably higher than those between the same tests and attainments at the end of the first term. This difference is doubtless due to the fact that the measures of reading ability are more reliable at the later time; the pupils' reading ability is more stable and represents a greater range of ability. It would be expected, therefore, that the correlations presented in this report would have been higher had the reading attainments been measured at the end of the year instead of at the mid-year.

Table 1 gives certain data concerning the distribution of test scores which should be taken into account in studying the correlations.

As a result of preliminary testing, the first five tests as revised for the present study showed very satisfactory distributions. In each case the scores were distributed throughout the range, excepting only the two extremes. In the letter-naming and the letter-sounding

tests there were many zero scores, as in the earlier study with New York City pupils. These tests were retained for further investigation of their value for diagnostic purposes.

TABLE 1

SCORES OF FIRST-GRADE PUPILS ON SEVEN TESTS OF READING READINESS

Test	Total Possible Score	Mean Score	Standard Deviation of Distribution	Percentage of Zero Scores	Percentage of Perfect Scores
1. Picture interpretation	45	30.9	8.35	0	1
2. Word-matching	18	10.9	3.86	0	1
3. Word-card recognition	20	9.7	5.20	0	0
4. Rhyming	7	4.0	1.76	0	0
5. Blending	7	4.1	1.75	0	0
6. Reading letters:					
a) Lower-case letters	26	2.3	8.70	42	2
b) Capital letters	26	4.1	7.50	31	2
7. Sounding letters	26	0.8	4.20	59	0

INTERCORRELATIONS OF TESTS

The intercorrelations of five tests are given in Table 2. Reading and sounding the letters are not included because of the large number of zero scores in the population studied.

TABLE 2

COEFFICIENTS OF RELIABILITY (SECURED BY SPLIT-HALVES TECHNIQUE) AND INTERCORRELATIONS OF FIVE READING-READINESS TESTS ADMINISTERED TO 182 PUPILS

Test	Coefficient of Reliability	Intercorrelation with Test				
		1	2	3	4	5
1. Picture interpretation	.86	.....	.36	.44	.34	.38
2. Word-matching	.86	.36	.....	.63	.48	.32
3. Word-card recognition	.88	.44	.63	.....	.49	.29
4. Rhyming	.84	.34	.48	.49	.....	.42
5. Blending	.81	.38	.32	.29	.42	.....

The reliability coefficients are very satisfactory. They could be made higher by increasing the length of the test, but such a change would be undesirable. The fact that the intercorrelations, with few

exceptions, are low means that the tests are not duplicating one another greatly but are measuring fairly distinctive abilities.

The highest intercorrelations are those between word-matching and word-card recognition, .63. Since the reliability coefficients of these two tests are .86 and .88, respectively, it is apparent that these two abilities are distinctive to a large degree. Neither of these tests correlates with any other as high as .50. In fact, this intercorrelation is the only correlation in the table as high as .50. The correlations for the picture-interpretation test range from .34 to .44; for the rhyming test, from .34 to .49; and for the blending test, from .29 to .42. The rhyming test correlates higher with the word-recognition test than with the blending. The only obvious reason for this superiority is that play and games involving rhyming of words tend to go with the other activities concerned with letters, words, and stories which are part of the pupils' preschool life.

CORRELATIONS OF THE TESTS WITH READING ATTAINMENTS

Table 3 shows the correlations of the readiness tests and the total reading score (on four tests) and other data in the case of seven classes which gave a sufficient number of complete records to be useful. The classes are grouped into five categories according to the type of program used. All classes were provided with the same basal readers and workbooks and with a fairly large amount of supplementary books and other materials.

Group I.—Group I consists of two classes following a fairly systematic procedure in which, after some preliminary work of an informal character, a program based on the preprimer and primer, with correlated activities including definite instruction in the analysis of word-form and word-sound characteristics, was introduced. These were the two largest classes of the seven. The mean scores on the reading-readiness tests give an average rank position (5) which is below the median of the seven classes. The mean reading score of Class B is the highest of all despite the fact that the reading-readiness score ranks in fourth place. Class A is one place higher in achievement than in initial reading readiness.

The correlations of total reading readiness and reading attainment at midyear are high, .70 and .72. They would doubtless be

TABLE 3

COMPARISON OF READING READINESS AND READING ACHIEVEMENT AT MIDYEAR OF SEVEN CLASSES CLASSIFIED INTO FIVE GROUPS ACCORDING TO TYPE OF READING PROGRAM USED

	Group I*		Group II†		Group III‡	Group IV§	Group V‖
	Class A	Class B	Class C	Class D	Class E	Class F	Class G
Size of class:							
Number of pupils	32	37	23	12	18	14	20
Rank	2	1	3	7	5	6	4
Reading-readiness score:							
Mean	60.3	64.2	67.2	66.2	46.8	62.1¶	76.0
Rank	6	4	2	3	7	5	1
Reading-achievement score:							
Mean	23.4	29.8	24.8	28.1	17.5	17.6	27.8
Rank	5	1	4	2	7	6	3
Correlation between reading score and:							
Total reading-readiness score	.70	.72	.56	.61**	.71	.77††	.22
Picture interpretation	.44	.46	.46	.52	.71	.51	.27
Word-matching	.67	.70	.62	.68	.57	.....	.27
Word-card recognition	.65	.44	.46	.58	.66	.78	.30
Rhyming	.67	.58	.09	.22	.03	.41	−.07
Blending	.30	.54	.10	.18	.19	.22	.16
Reading letters	.63	.55	.22	.....	.39	.....	.38
Sounding letters	.48	.38	.18	.....	.27	.....	.22
Mental age	.45	.....	.40	.....	.....	.....	.....
Correlation between reading readiness and teachers' estimate of reading achievement	.51	.59	.52	.67	.75	.....	.24

* The classes in Group I used preprimers and primer and word analysis, including study of word sounds (phonetics).

† The classes in Group II used preprimers and primer but little or no word analysis or phonetics. Emphasis was placed on recognition of word configuration.

‡ Group III made large use of experience material, charts, announcements, and miscellaneous materials. Less systematic use was made of basal books, and there was little or no word analysis or phonetics.

§ Group IV used methods and materials similar to those described for Group III and also employed a moderate amount of word analysis or phonetics.

‖ Group V began with charts, experience stories, and casual work with many books, then changed to more systematic use of textbooks.

¶ Estimated on basis of the tests given.

** Does not include the scores on the letter-reading tests.

†† Does not include the scores on the tests of word-matching and reading letters.

higher had reading achievement been measured at the end of the year. The correlations of total readiness and the teachers' judgments of reading ability at the midyear are lower, .51 and .59, but still substantial.

Of the separate reading-readiness tests, the word-matching test gives the highest correlations with reading. The next is the rhyming test, followed by naming the letters and the word-card recognition. The picture-interpretation, the blending, and the letter-sounding tests are about the same. All the single tests appear to measure abilities that enter substantially into the processes of learning to read.

Group II.—This group consists of two smaller classes which were taught in much the same manner as those in Group I except that there was little or no word analysis or phonetic work. In these classes a type of "look and say" procedure was followed. Words were learned as total configurations, and, although total word forms were compared, little was done to teach the pupils to recognize individual letters or letter or phonogram sounds, or to employ such elements in working out the recognition and the pronunciation of words. Work of this sort was to be introduced later.

The mean reading score of these two classes at midyear is almost identical with that of the two in Group I (26.45 and 26.60, respectively). The classes in Group II have a slightly higher average reading-readiness score, however (66.70 compared with 62.25). The total readiness scores in the classes in Group II give somewhat lower correlations with reading attainments. A survey of the correlations of the individual tests shows that word-matching gives the highest correlation and that word-card recognition and picture-interpretation tests are next. The most significant fact is that in this group the rhyming and the blending tests and the letter-reading and the letter-sounding tests give much lower predictions than they did in Group I. These differences can scarcely be accounted for in any way other than on the assumption that they are due to the differences in instruction. When word-form and word-sound analyses are introduced and pupils are encouraged to identify and to sound letters and groups of letters in working out the recognition and the pronunciation of words, the reading attainments show fairly high correlations with tests of rhyming, blending, naming letters, and giving word sounds.

When such word-analysis activities are not used or are used to a less extent, the correlations with these tests are lower.

It should be noted that in Group II the test of matching total word forms gives the highest correlation; indeed, this coefficient is higher than that for the total readiness score. Since picture interpretation and word-card recognition give high correlations, it is obvious that the prediction is reduced by including in the total the scores from the rhyming, the blending, and the letter tests. Word-analysis activities were, however, to be introduced later in these classes, and it is probable, therefore, that reading progress thereafter would be correlated with ability in these tests.

Groups III and IV.—These two classes offer the same major contrast as Groups I and II, but the differences appear on a different type of basal instruction. Groups III and IV consist of two classes making much less systematic use of the basal textbook and much more use of experience material, improvised charts, announcements, etc. The class in Group III has the lowest reading-readiness score in the list of seven, and its midyear reading attainment is also the lowest. The class in Group IV is next to the smallest, has third from the lowest reading-readiness score, and has next to the lowest reading ability at midyear. In both classes the correlations of total reading readiness and midyear reading ability are high, .71 and .77. The correlation of reading readiness and the teacher's judgment of reading ability in the Group III class is also high, .75.

In the Group III class, employing little or no word analysis or phonetics, the correlations of the rhyming, the blending, and the letter-sounding tests are low. The best predictions are made by picture interpretation, word-card recognition, and word-matching. That the first two of these should give relatively high correlations is suggested by the extensive use of pictures, posters, charts, and blackboard work used in this class. In Group IV, in which these materials were used extensively, the word-card and the picture tests also give the highest correlations. In this class, which also used some phonetics and word analysis, the rhyming test gives a higher correlation than in the class in Group III, but the blending test does not give a reliably higher figure.

Group V.—Class G cannot be easily grouped with any of the pre-

ceding classes. It began with informal work and later shifted to more systematic use of textbooks. It is difficult to classify on the basis of word study, which was inconsistent. The class management was rated as rather poor, and the pupils seemed more tense than in other groups. This class has the highest average reading-readiness score of the seven; it is, in fact, approximately 15 per cent higher than the next lower score. Midterm achievement on the reading tests is third in the list. In this class the reading-readiness tests give far lower correlations than in any other, both with the scores on reading tests and with the teacher's judgment. The highest correlation is given by the test of letters; word-card recognition, word-matching, and picture interpretation are next and about the same; the blending is low; and the rhyming is slightly negative. Since both examiners rated this teacher as the least capable in the group, the interpretation is similar to that presented in the preceding report,[1] namely, that the more effectively instruction is adjusted to individual differences, the higher the correlation between a predictive measure and later achievement. The better the teaching, in other words, the more useful and valid are the reading-readiness tests for guidance and prediction.

Other findings.—Before a discussion is given of the main results, two other findings should be presented. The first is that the correlations of the readiness tests with the midyear reading tests are similar to those with the teachers' judgments; the former are higher in three cases and the latter in three. The second is that mental age, in the two classes in which it is available, provides a comparatively poor prediction of reading progress. In this investigation, as in the earlier study, it appears that mental age predicts reading progress less well than several individual subtests in a good reading-readiness battery. Since mental age does not correlate highly with these subtests (the coefficients in Classes A and C vary from .18 to .60), it may well be employed as a subtest, with a weight similar to that assigned to the median subtest in such a battery as that used in this study.

CONCLUSIONS

Several conclusions are suggested by the results: (1) The tests which measure reading progress two or three weeks after entering

[1] A. I. Gates, G. L. Bond, and D. Russell, *op. cit.*

n the whole, satisfactory predictions of reading ability
2) The predictive value of a particular test varies with
method. In general, the highest correlations are given
h measure the abilities which pupils are led to empha-
:arning. (3) The better a teacher adjusts her work to a
l abilities, as revealed by the readiness tests, the better
ı made by the tests.

otheses lead to the assumption that the teacher will
om reading-readiness tests if she concerns herself with
ıs in each test and arranges her later work to conform
atement is not a denial of the value of a "total score."
tion, however, that, when only the total score is con-
h, if not most, of the information of value for the
ıe pupil is lost and the predictive value is often lowered.
if a teacher is planning to emphasize chiefly whole-
tion without analysis, it is more important for her to
pil's status on word-recognition tests than on "total
:he former will give a better correlation with reading
ı the latter.

:ideration, moreover, points to the desirability of know-
:ully considering each pupil's status on each readiness
ɔnducting subsequent instruction, not in any standard-
:or the class as a whole, but in such various forms as are
individual needs. For example, if a pupil rates very
-matching and low in blending, it is important to avoid
ıding with a strong emphasis on phonetics and analytic
place little dependence on word configuration. It would
se in this case either to fail to note, or to do anything
eakness in rhyming. To restrict the work to "look and
ɔrobably result in overemphasis of this type of attack
ng of the weakness in rhyming. The ability to sense
ıe that children must learn by experience. The more
ırded on entering school, the greater their need of such
It is for such "diagnostic" purposes that the tests of
sounding individual letters were retained despite the
out half the pupils obtained zero scores. It is of im-
:he teacher to know which pupils know their letters and
t.

In this view, the reading-readiness tests should be used as any good series of diagnostic tests are employed later. Their main purpose is to reveal the pupil's status in each of the important skills involved in the early stage of reading so that achievement may be insured by giving each pupil the kind and the amount of help which he needs.

The types of abilities tested in this study were those found in the earlier investigation to be most promising for this purpose as well as for mere prediction. It should be noted that all these abilities, except mental age, may be readily improved by instruction. Since any intelligent teacher can tell from reading the test what these abilities are and since a variety of methods for improving them are widely known, the pupil's status on these tests suggests at once the most valuable forms of instruction to include both in the "reading-readiness" and the full-fledged reading program.

THE TEACHING OF LINEAR MEASURE, SQUARE MEASURE, AND TIME[1]

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*

THE Committee of Seven in 1938 completed a five-year piece of research on three out of four studies of the grade placement of mensuration: linear measure, square measure, and time measure. Volume measure is still under investigation.

These studies of mensuration have been the most thorough and significant of any of the studies made by the Committee of Seven to date. More time has gone into the preparation of teaching outlines and tests; more preliminary experiments have been done; and the results have been more carefully analyzed into their various parts than in any of the preceding studies. The experience of the committee during the preceding decade and more has been capitalized in these experiments of the past five years. A total of 8,355 children in forty cities and towns scattered through seven states have been used in these experiments.

A study of the teaching outlines and tests for linear measure, square measure, and time measure[2] is necessary for an adequate con-

[1] This article presents the results of Committee of Seven Experiments and Recommendations for Curricular Placement. The Committee of Seven of the Northern Illinois Conference on Supervision during the course of these experiments has consisted of the following persons: Orville T. Bright, superintendent of schools, Flossmoor; Turner C. Chandler, principal of the Burnside School, Chicago; Harry O. Gillet, principal of the University Elementary School, University of Chicago; J. R. Harper, superintendent of schools, Wilmette; Raymond Osborne, principal of the Francis W. Parker School, Chicago (temporarily *in absentia*); O. E. Peterson, head of the Department of Education, Northern Illinois State Teachers College, De Kalb (secretary); Howard C. Storm, superintendent of schools, Batavia; Carleton Washburne, superintendent of schools, Winnetka (chairman); William H. Voas, psychologist in the public schools at Winnetka (associate); and Mabel Vogel Morphett, director of research in the public schools at Winnetka (director of research for the committee).

[2] Obtainable from the Winnetka Educational Press, Winnetka, Illinois, for eighty-five cents each.

cept of what is meant by placement at the various levels. In general, it will be found that these teaching outlines recommend a great many personal experiences by children in manipulating actual objects and doing actual measurement. In this account we have suggested merely the outcome that may be expected from such experiences. A more abstract form of teaching might well make the placement higher than is indicated. Such teaching would, however, be difficult to justify in terms of modern pedagogy and the basic understanding that it is desired to give children through work in measurement.

The procedures used in these experiments correspond, in general, with the procedures that have been used by the Committee of Seven during the past ten or fifteen years and may be summarized briefly as follows:

On the basis of committee judgment, preliminary grade placements were estimated for each topic. In the schools of the committee members each topic was taught in the estimated grade and in the grade above and the grade below. On the basis of the results obtained from these preliminary experiments, the materials and the placement were revised.

The co-operation of hundreds of classes in a wide variety of communities scattered through the Middle West was next secured. Each topic was taught to the children in the grade tentatively established by the preliminary experiments and in the grade above and the grade below. All these children were given intelligence tests and foundations tests in number processes and concepts and, for the more advanced sections, in the apparently prerequisite concepts and processes in the fields being studied. After these foundations tests the teacher was given a week to train the children in any of these supposedly prerequisite concepts and skills in which they showed weaknesses. Then another parallel form of the foundations test was given. Only data from the second form were used in the final tabulations.

Children were then given a pretest covering completely the topic about to be taught, for the purpose of finding out how much knowledge children already had of that topic—knowledge which they had acquired either through incidental learning from general experience or from previous teaching.

During the experimental period teachers taught the unit in accordance with the detailed teaching outline which was prepared by the Committee of Seven, the teaching time being strictly controlled and, therefore, presumably uniform for all schools. The exact teaching time for each group of topics is indicated in the teaching instructions. In general, it ranged for each group (as taught in the experiments, not as re-grouped in the following recommendations) from six days to four weeks, the teaching periods being twenty to thirty minutes a day. The teaching outlines were sufficiently definite and detailed to assure reasonably uniform procedures. Strictly speaking, therefore, the results are always in terms of the specific method, the specific amount of time, and the specific tests planned by the committee. It is always possible that further experimental work may show that, were a topic taught for a different length of time or by a different method or were it tested by a different type of test, the placement would be altered.

After the teaching period, a period of six weeks was allowed to elapse with no teaching or review of the topics. Then, for determining how much of what was taught was retained well beyond the teaching period, a retention test was given, parallel, problem by problem, with the pretest—in reality, merely another form of the pretest.

The results were plotted against mental ages in six-month intervals and against the foundations-test scores. In most cases, however, foundations-test scores were found to be so high as to be insignificant for determining placement; that is, well before the children had reached the mental age at which they made satisfactory scores on the retention test, their scores on the foundations test were, in a large majority of cases, so high as to indicate a satisfactory background of the prerequisite knowledge and skills. Therefore foundations tests have been ignored in the tabulations and graphs.

For each problem or group of problems in each topic a graph was prepared like Figures 1 and 2. All curves shown have been smoothed on the graphs.

The dashed line at the bottom of each graph indicates the per-

centage of high pretest scores at each mental level,[1] or the children's ability to handle the subject before the experimental teaching began.

The middle solid line indicates the percentage of high scores on the retention test made by children at each mental level whose scores on the pretest indicated an inadequate knowledge of the topic before experimental work began. This solid line is the line most com-

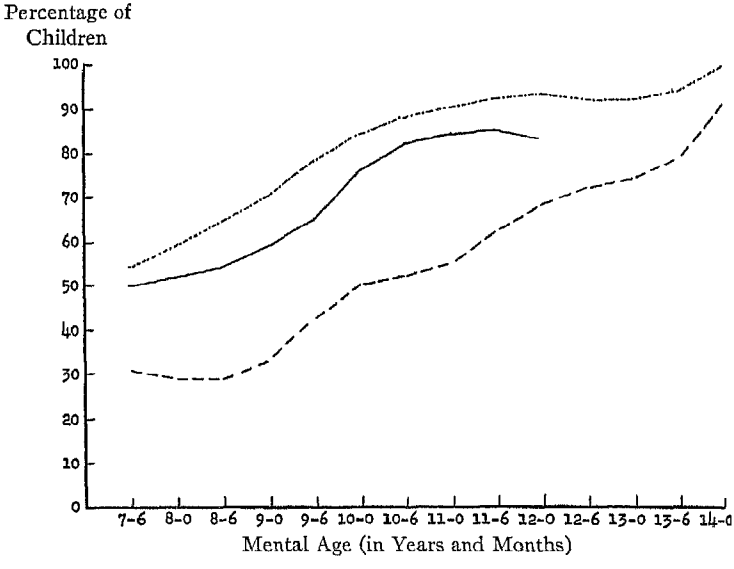

FIG. 1.—Percentage of pupils at each mental-age level making satisfactory pretest scores and satisfactory retention-test scores in measuring lines to the half-inch and the quarter-inch.

monly used in determining the level at which an item can be satisfactorily taught. The point at which it crosses the 75 per cent standard is usually considered to be the level for efficient teaching.

The dotted line indicates the percentage of high retention-test scores of all children whether or not they had made low pretest scores. If it were certain that high pretest scores were the result of

[1] Scores were considered high when three out of four similar problems were correct or, if only one problem was given, when that problem was correct. Scores were considered low or unsatisfactory when none to two out of four problems were right or, in case of a single problem, when that one was wrong. These criteria were used for foundations-test scores, pretest scores, and retention-test scores.

incidental learning and everyday experience rather than possible previous instruction in school, this line would be the logical curve to follow in determining placement. Since, however, we have no way of knowing how much time in some previous grade may have been given to instruction in the topic, this line for the totality of the children is a little hazardous; it does not represent the complete control which the committee has sought to achieve and which is indicated by

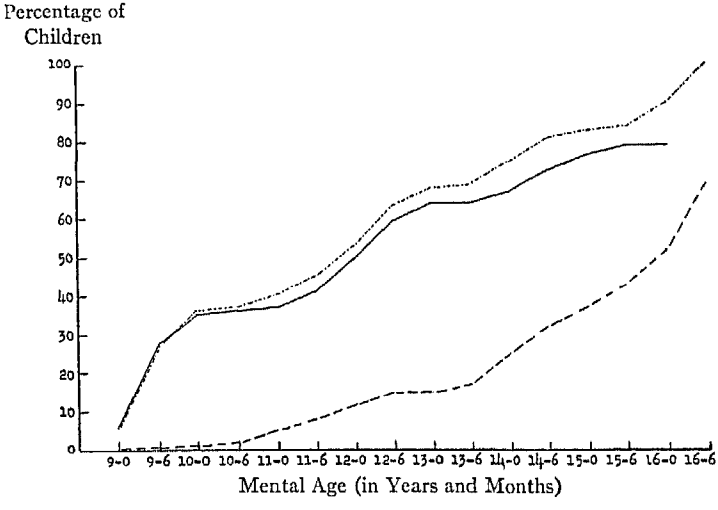

FIG. 2.—Percentage of pupils at each mental-age level making satisfactory pretest scores and satisfactory retention-test scores in subtraction of feet and inches involving borrowing.

the solid line. However, in making practical recommendations, the committee has taken cognizance of this line for the totality, as well as the solid line for children who had low pretests, especially when the percentage of children making low pretests was relatively small (less than 30 or 35).

Fifty-one such graphs were made for linear measure, forty-seven for square measure, and forty-one for time. The recommendations that follow are based on these graphs.

For several topics comparisons were made of the scores of children of the same mental age of various intelligence quotients. In each case intelligence quotient appeared to be unrelated to achievement

except as it is a factor in mental age. Over-age children with intelligence quotients of 80 and mental ages of 10 made practically the same scores as under-age children with intelligence quotients of 120 and mental ages of 10. Intelligence quotient as such has, therefore, been ignored.

In general, the committee has adhered to its traditional standard that an item should ordinarily be taught only to children at a mental level where at least three-fourths of them are fairly sure of success after a reasonable length of time of teaching. This standard is admittedly arbitrary. Any school system content to have a smaller percentage of children master a topic, or perhaps even a school that is willing to give an additional amount of time to the teaching, may conceivably lower the level by six months or a year, the amount of time by which it is lowered depending on what results are acceptable or how much more teaching time can be given.

It has seemed to the committee that the results of the present experimentation would be more useful if the topics were presented in groups by mental-age levels, rather than in separate items unrelated to necessary teaching constellations. In the arrangement of the materials in this way, some liberty has been taken with strict statistical interpretation of the graphs. If, for example, a single item, closely related to other items, appears slightly more difficult or slightly easier than most of the constellation in which, for practical purposes, it appears to belong, it has been put with those to which it obviously relates, rather than isolated at a level higher or lower. The committee has prepared, however, a mimeographed booklet giving each test item in summarized form and a brief analysis of the graphs for each item.[1]

The recommended curriculum, then, for measurement, in terms of mental-age levels, is as follows:

MENTAL AGE 7 TO 8

Linear measure.—Simple comparisons of length are readily learned at this level (indeed, some are well known before teaching begins), such as ability to recognize which bench is four times as long or

[1] This booklet may be purchased from the Research Department of the Winnetka Public Schools, Winnetka, Illinois, for fifteen cents.

which post is four times as high as a given one. Comparison of the thickness of books, however, when books are drawn side by side, calls for definite teaching but then is readily learned. The unit includes two, three, and four times as high, wide, long, thick, deep, etc.

Children readily learn to measure lines in even inches, although they find it somewhat more difficult to draw lines an even number of inches long. They can tell how many inches there are in a foot and in two feet, although recognition that twenty-four inches is two feet is somewhat harder than recognizing that two feet is twenty-four inches.

Square measure.—No square measure is indicated for this level.

Time.—Children can readily learn to read clocks to the even hour and to distinguish between morning and afternoon and the abbreviations "A.M." and "P.M."

MENTAL AGE 8 TO 9

Linear measure.—No linear measure is indicated at this level.

Square measure.—Children already recognize pretty well, and can easily learn to recognize very satisfactorily, areas that are two, three, or four times as large as a given area when either the height or the base is held constant. The way in which the pictures are drawn, however, makes a material difference. If four figures are placed in a row with base constant and with heights varying, like a flight of steps, it is easier for children to recognize that one picture is twice as large as the first, another one three times as large, etc. If, however, figures are placed in a row with the height constant and the base varying, the problem becomes definitely harder. Children can also recognize which rectangular area is half as large as a given area when the base or the altitude is held constant. With teaching, they learn to use a square inch of cardboard as a measuring device for answering such a question as, "Is this picture three times, four times, or six times as large as the square inch of cardboard?"

Time.—Children can learn to distinguish standardized units of time, such as minutes, hours, and days, from unstandardized units, such as length of time taken to walk a block. They can learn to read clocks to the half-hour and the quarter-hour and to read the calendar. They can learn to count elapsed days within the same month on

the calendar, and they readily learn a simple table of time, consisting of minutes, hours, days, and weeks.

MENTAL AGE 9 TO 10

Linear measure.—The relation of inches, feet, and yards can easily be taught in its simpler forms. The number of inches in one or two feet, it will be remembered, went into the 7–8 year level; the number of inches in three feet could have come into the 8–9 year level but would have been isolated there, while for teaching purposes it fits in well with the number of feet in a yard, the number of feet in two yards, the number of yards in six feet, the number of inches in a yard, etc., all of which cluster around the mental ages of nine years and nine years, six months.

Comparisons of length, depth, height, width, etc., involving one-half, one-third, and one-fourth, probably belong here. We say this in spite of the fact that comparisons involving one-half, such as the ability to select from four poles one that is one-half as high as a specified pole, could be taught a year earlier, and comparisons involving one-third, one-fourth, and one-eighth belong, according to the graphs, at the 10–11 year level. Similar comparisons, however, in square measure place them definitely at the mental age 9–10, and certain differences in the distribution of the children and the form of statement of the problem probably account sufficiently for the apparent discrepancies. For practical purposes it seems, therefore, that this unit of linear measure can be taught effectively at approximately the same time as the corresponding unit in square measure.

Square measure.—Children at this age have little difficulty in learning to tell whether a given rectangle is one-half, one-third, one-fourth, or one-eighth as large as a specified rectangle when either height or base is held constant.

Children can begin to determine the areas of rectangles by dividing them up into square inches with a ruler. The high pretest scores indicate that little teaching is necessary to give this ability at this age.

Recognition of a square foot drawn on a blackboard, as distinguished from squares 6 by 6 inches, 18 by 18 inches, 24 by 24 inches, etc., is already possible for a fairly large proportion of nine-

year-olds before definite teaching and is as easily learned at this level as at any subsequent one. At this level, too, children learn to find how many square inches there are in a square foot by drawing a square foot and ruling it off into square inches.

Time.—No time measure is indicated at this level.

MENTAL AGE 10 TO 11

Linear measure.—Children can now learn effectively to measure in feet and inches and to measure and draw lines accurately to the quarter of an inch. They can estimate the length of their classroom roughly in terms of a multiple-choice question ("Which of these numbers tells about how long your classroom is: 30 feet, 50 feet, 75 feet?"), but this ability shows little relation to mental age. Children at nine are fully as successful as children at twelve, and, while there is some improvement at a mental age of thirteen, there is little thereafter. The whole graph is exceedingly irregular.

Much the same can be said about recognizing which units of measure are used to express the distance between cities, the length of a piece of cloth, the height of a building, the length of a farm. There is high success with this work, after teaching, at every mental-age level from ten up, and the few children included in the experiment with mental ages as low as nine did almost as well as those at mental levels of ten and higher.

When dimensions are given in terms of whole feet, the perimeter of a garden belongs definitely at this age level. The rise of the curve is steep to this point, and thereafter there is little improvement. Pretest scores are low all the way up to a mental age of fifteen; this topic has to be systematically taught.

Strangely enough, such a problem as the following seems to require relatively little teaching: "Jack wants his table top to be 3 ft. 4 in. long. He has some boards 5 ft. 6 in. long. How much should he saw off the boards to have the table the right length?" By a mental age of ten years and six months pretest scores are only a little lower than retention-test scores, and throughout the graph pretest and retention-test scores run surprisingly close. Reasonable success is achieved by a mental age of ten years and six months, but there is still marked improvement to a mental age of eleven years and six

months, after which the curve flattens out almost completely. Other problems involving the different forms of subtraction (comparison and addition) but involving no more technical difficulty belong at this same level, but for some unknown reason they show much more need for systematic teaching. The following problem, in particular, shows a wide gap between pretest and retention-test scores: "Bert has a piece of lumber 8 ft. 9 in. long. If he uses 6 ft. 4 in. for making a bench, how much will he have left?"

The following problem: "The table Ralph is making needs four legs, each one 2 ft. 1 in. long. How long a piece of lumber must he have to make all four legs?" belongs definitely at the mental level of ten to eleven years. Improvement thereafter is very gradual. Pretest scores are rather low.

Square measure.—No square measure is indicated at this level.

Time.—Children can now complete the table of time (seconds in one minute, minutes in one hour, hours in one day, days in one week, weeks in one month, months in one year, days in one month, days in one year, days in one leap year, and weeks in one year). They can learn to read clocks accurately to the minute and to express time accurately to the minute in the form, 10:22 P.M.

The recognition of the difference between arbitrary and natural time units, such as hours and minutes versus days and years, is satisfactorily completed at this level. Just as they can solve problems involving simple manipulation with linear measure, so they can calculate the amount of time elapsed in even quarter-hours, from 10:15 to 11:00 for example, when the total time is within the same hour. They can find the number of minutes required to walk one block if, say, thirty minutes are needed to walk fifteen blocks, or they can find the number of days needed to make one poster if seventy-two days are needed to make nine posters.

MENTAL AGE 11 TO 12

Linear measure.—No linear measure is indicated for this level.

Square measure.—This mental age seems to be the level at which square measure as a regular topic can best be introduced in its simpler forms. For the first time children can recognize that an area is a certain number of times larger than another area when both

height and base differ; for example, they can take a sheet of paper half the height and half the width of another and, using it as a unit, determine that the larger paper is four times as large as the smaller sheet. They can recognize a square inch drawn on the blackboard, as distinct from a half-inch square or a two-inch square, although this recognition is not clearly a function of mental age, since the graph is nearly flat. They can calculate the number of square inches in a given area when the dimensions are given. They can learn easily how many square inches there are in a square foot. They are able to see how many pieces of paper one foot square will go into a marked-off rectangle on the blackboard and also, of course, how many square-foot pieces of paper would be needed to cover a square yard on the blackboard. They can easily memorize the number of square feet in a square yard and can learn to calculate the number of square feet in an area when the dimensions are given in even feet.

Time.—No time measure is indicated for this level.

MENTAL AGE 12 TO 13

Linear measure.—Three distinct, new elements of linear measure can be successfully taught at this level although all of them give better results if postponed to the following year: drawing and measuring lines to the eighth of an inch ($2\frac{7}{8}$ inches, etc.),[1] calculating the number of inches in a fraction of a yard ($\frac{1}{2}$, $\frac{2}{3}$, etc.), and measuring distances on maps with a scale of miles.

Square measure.—Not until this level are children successful in learning to recognize squares and oblongs, as distinct from triangles, trapezoids, etc., as rectangles. It is hard to believe, however, that, with longer teaching and practice on this element, such recognition could not be taught earlier, but there is probably little object in doing so. Children can recognize relative sizes of rectangles (marked off in squares), that a large rectangle is, for example, six times as large as a small one, or a small rectangle one-sixth as large as a large one, when base and altitude of the larger rectangles differ from those dimensions of the smaller one. They can also, with some difficulty,

[1] Measuring is not particularly satisfactory at any level for those with low pretest scores, but pretest scores reach 73 per cent at the mental age of thirteen years and six months, 77 per cent at the mental age of fourteen years and six months.

learn how many small cards can be cut from a larger card, when they are in readily divisible units, like the number of 3 by 5 cards that can be cut from a sheet 9 by 10, but this unit is much more readily learned at the next level higher.

Time.—Children can solve simple problems in the multiplication of hours and minutes, even involving the change of a product like seven hours and seventy minutes to eight hours and ten minutes. This particular element could be taught a little earlier were it not for the fact that at the preceding level there are no other aspects of time measure indicated. It is at the twelve-year level that children can count elapsed weeks on a calendar from one month into the next and the elapsed days from one month into the next, and the elapsed hours and minutes of more than an hour, such as 8:45 to 10:30, or 8:45 in the morning to 4:15 in the afternoon.

MENTAL AGE 13 TO 14

Linear measure.—Children can divide feet and inches by a whole number when both the feet and the inches are evenly divisible, and can divide yards by inches, making the necessary change of denomination, when the problem is easy, such as the following: "Barbara is putting blue paper on her cupboard shelves. She has 3 yards of blue paper. The shelves are 27 inches long. How many shelves will this cover?"

Square measure.—Children of this mental age can learn to draw rectangles of a given number of square inches with varying bases when the problem is very easy, such as drawing a four-square-inch rectangle two inches wide. They can even do this particular problem at the level below; but, if the problem involves a fraction, such as a base one-half inch wide, it is better at the next level higher.

While there is some doubt as to the children's realistic concept of the size of an acre or of a square mile (see the next level), they can compute the area of a tract of land in square miles, when the dimensions are given in miles, at a level below mental age 13–14. They can remember satisfactorily the number of acres in a square mile and calculate from a diagram the acres in a half-section. Smaller fractions of a section, however, belong in the next level higher.

Time.—No time measure is indicated for this level.

MENTAL AGE 14 AND HIGHER

Introduction.—It is not until children have reached a mental age of approximately fourteen, and sometimes not until even later, that the manipulation of denominate numbers, involving the more complicated forms of applying the four fundamental processes and involving changes in denomination, can be effectively taught and retained. A thorough understanding of the measures to be used and insight into the simpler manipulation of the measures, indicated in the preceding recommendations, lay a foundation upon which the later skills can be built without wasteful and confusing loss of time and effort.

Linear measure.—All practical forms of applying the fundamental operations to linear measure can be taught at mental ages approximating fourteen. Simpler forms, such as addition of feet and inches involving reduction of the answers, can go a trifle lower; more difficult forms, such as dividing ten feet one inch by two feet seven inches, must either go higher or receive more intensive teaching than was done in the experiment.

It is interesting that, although the addition of feet and inches involving reduction of the answers can be learned at the mental age of thirteen years and six months, the level of effective learning goes up to fifteen when the problem is complicated by involving the perimeter of a rectangle.

Subtraction of feet and inches involving borrowing shows a similar curve except that, after the mental age of fourteen years and six months, it flattens out materially. Multiplication of feet and inches involving carrying reaches satisfactory achievement also at about the mental age of fourteen years and six months but continues to improve thereafter.

In the division of feet and inches a marked contrast is shown between problems that "come out even" and problems that require more arithmetical manipulation. Such a problem as the following is relatively easy: "Paul has several pieces of lumber 3 ft. 2 in. long. He wants to fill in a gap in the sidewalk 12 ft. 8 in. long. How many pieces of his lumber will he need to fill in the gap?" Pretest scores are almost as good as retention-test scores for such a problem, the

children's common sense and visualization being, in many cases, sufficient to solve it before formal teaching. With teaching, there is very high success by a mental age of fourteen years and six months and reasonable success as low as thirteen.

When, however, the problem is made more difficult so that children have to find, for example, how long each piece will be if a plank thirteen feet four inches long is sawed into four equal pieces, the children do not make a satisfactory showing until a mental age of about sixteen. The type of division involved makes no difference, that is, finding the size of a given part of a whole, finding how many parts of a given size are contained in a whole, or finding by what number a part must be multiplied in order to give a whole.

The table of linear measure can, of course, be completed at this time by including the number of feet in a mile.

Square measure.—Finding the number of acres in usual fractions of a section (one-half, one-fourth, one-eighth, and one-sixteenth) can be readily calculated from a diagram. The familiar schoolroom problems of finding the number of square yards of linoleum needed to cover a floor the dimensions of which are given in feet is decidedly difficult for children below fourteen, but, at a mental age of fourteen years and six months, scores are satisfactory.

Whether the teaching was inadequate or whether there was something more inherently difficult than appears at first sight, the experimental results showed children's ability to estimate the number of acres in their school grounds not to be satisfactory until a mental age of fifteen years and six months. A problem asking them to diagram a square mile of land in their neighborhood by indicating street or road names was not satisfactorily achieved by children until a mental age of seventeen. Yet children's ability to manipulate acres and square miles, in spite of their seemingly vague concept of the areas involved, comes earlier. Question may well be raised how much good it does pupils to manipulate such measurements when they have little idea of the meaning.

Time.—The children are able to solve problems involving adding and multiplying hours and minutes, and dividing, etc., with these time units, at mental levels ranging between twelve years and sixteen years six months, according to the difficulty of the problem. In gen-

eral, however, the manipulation of time units beyond the things indicated for the lower levels clearly belongs at mental ages of fourteen and up.

SUMMARY

In summary, it will be seen that the simplest quantitative relationships in linear measure, square measure, and time are readily understood by children of mental levels as low as seven and eight; that more accurate detailed relationships and very simple manipulations can be effectively taught at mental levels from nine to twelve; whereas real accuracy in measurement, any complex relationships, and any manipulation involving the changing of units or the use of such relatively uncommon units as acres and square miles and scales of miles belong at mental levels usually associated with the junior high school, and particularly with the upper part of the junior high school.

Mensuration is not a single topic, but a great variety of different skills and concepts belonging at a variety of different levels. Most of the elements show positive relationship to mental age, while few of them show any important relationship to the ordinary processes of arithmetic; that is, the seemingly prerequisite number processes are usually well enough known by the time a child reaches a level for a given unit of mensuration, so that no consideration has to be given to this skill.

It should be added, in passing, that pretest scores show gradual improvement in most topics from the low levels to the higher levels, usually tending to parallel roughly the retention scores, except that they rise less steeply. The gap between pretest scores and retention-test scores is, in most cases, very wide and shows a pronounced effect from direct teaching. In only a few cases do pretest scores indicate that the majority of children, without direct teaching, will pick up a satisfactory knowledge of mensuration. In the great majority of cases satisfactory learning and retention are achieved in a remarkably short time of concrete teaching when children have reached a suitable mental level.

THE PLACE OF HOME STUDY IN RURAL EDUCATION

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EDUCATIONAL leaders generally see only two possibilities for the rural child: the one-room school or the consolidated school. The First International Conference on Correspondence Education, held at Victoria, British Columbia, on August 22, 23, and 24, 1938, brought strikingly to the attention of the delegates from the United States the fact that Canada, Australia, and New Zealand have for many years been successfully using a third method by which to provide education in rural areas, namely, home study.

No arguments need be advanced for either the one-room school or the consolidated school. There is ample evidence that, given respectable financial support and satisfactory instructional and supervisory service, both can offer a superior type of education. Since home study has, strangely, been overlooked in the United States, in spite of our generally accepted reputation as the most progressive nation in the world in public education, discussion of this technique is justified.

FIELDS OF USEFULNESS FOR HOME STUDY

Home study should be used for those children who must put forth undue effort or must unreasonably expose themselves in going to and from school and for whom transportation provided by the district would be either too costly or too uncertain. It should also serve physically incapacitated boys and girls who cannot or should not leave their homes, even though they may not live far from a school. Home study is essential for them if they are to receive any education at all.

Finally, there are boys and girls attending the many one-room schools which have such small enrolments that per pupil costs are unreasonably high. For the sake of economy pupils in these schools should be educated in their homes. With the decline in rural popula-

tion in many parts of the United States, resulting from the increase in the size of farms and the decrease in the size of families, the one-room school of very small enrolment has become rather common.

There are three types of children, then, to whom the opportunity for home study should be made available: isolated children, physically handicapped children, and children attending one-room schools with such small enrolments that home instruction would be much less expensive. There is no way of estimating the number of boys and girls in the United States who come within these three categories, but it is certain that the number runs into the tens of thousands.

DOES HOME STUDY PROVIDE SATISFACTORY EDUCATION?

A demonstration that it may be less expensive or more convenient for a child or a high-school youth to obtain his schooling at home is not, in itself, convincing evidence of the desirability of such education. The nature of the education must also receive consideration. Home study cannot be criticized on the ground that the pupil's attainment is lower or his progress less satisfactory when the work is carried on at home. Wherever the plan is used, educators have found that the child who learns at home need not fear comparison with the child who goes to school.

The most cogent argument advanced against home study is that it denies the child face-to-face contact, stimulating interaction, and social intercourse with his classmates. There is undeniably a difficulty here, but there seem to be ways of overcoming it. New Zealand has perhaps done most to set up compensating socializing agencies. That dominion provides traveling libraries, magazines and bulletins, clubs—such as the Lone Guides, Lone Scouts, or Pen Friendship Club—savings banks, correspondence school parents' associations, and, finally, one- or two-week schools to which the isolated pupils are brought for intensive training and socializing experiences. Even when all these services are supplied in addition to regular instruction, the cost per pupil is less than in the typical town or city school.

If there are disadvantages to be overcome, there are also great inherent advantages. Individualization with respect to the type of subject matter and assistance given and with respect to the rate at which the school work is covered is naturally and easily provided. The pupil who is sick finds no hiatus when he returns to his work.

Because the teacher is an individual helper, he becomes an ideal whose influence, it seems at times, is the greater for his absence.

Certain other advantages of home study are mentioned in a statement from A. G. Butchers, headmaster of the New Zealand Education Department, Correspondence School.

From the point of view of health also there are compensating advantages in studying at home, particularly for pupils who live miles from a school. In wet weather they have not to make the long journey to and fro in the wind and the rain. Nor have they to sit all day with wet, cold feet, with only a cold packed lunch to sustain them at the midday interval. They are consequently not so liable to catch or to spread colds. They are not exposed to epidemics of infections or contagious sickness. They lose no time traveling to and from school. They are not absent from home, from perhaps 7:30 or 8:00 A.M. until perhaps 5:00 or 6:00 P.M. School, for them, begins at 9:00 and ends at 3:00 or 3:30. They are warm and dry. They have a hot midday meal with the rest of the family. Before and after school they delight in profitably helping their parents on the farm and in the home. Careful investigation has revealed very little, if anything, in the nature of excessive employment of Correspondence-School pupils to the detriment of their health or education. This possibility of economically helping father or mother while continuing their studies by correspondence has simply opened for many the door to continued education, since it was impossible for them to be spared all day to attend school. The practical work is complementary to the sedentary and bookish, and helps to promote balanced growth of mind and body. The physical and moral advantages of a free country life, lived so much out-of-doors with horses and other animals, in a natural and wholesome way, contrast strongly with the disadvantages of living in urban areas, the noise and pollution caused by motors, trains, factories, flats, boarding-houses, picture theaters, and all the rest of the city child's swift-moving and sophisticated life. There is even something to be said for the absence of the teacher, whose continuous presence and voice are apt to overwhelm the classroom pupil. There is not enough quiet in the ordinary school, not enough time for reflection and thought. Things are always moving. The Correspondence-School pupil can put down his pen at times and indulge in daydreams, or get up and have a scamper outside with his dog, and resume his studies the better for the interlude. He is a human individual, not merely a unit of a flock, moving or stopping just as the drovers and dogs direct. These things must be borne in mind when the balance is being struck between the disadvantages and the advantages of correspondence education for children unable to attend school. Nor should the wider social implications and values of the correspondence methods as described be overlooked or underestimated.[1]

[1] A. G. Butchers, "Social Education through the Correspondence School," *Report of the First International Conference on Correspondence Education*, pp. 61 ff. Victoria, British Columbia: Department of Education, 1938.

STATE-WIDE PROGRAMS NEEDED

Most, if not all, of our states are urgently in need of correspondence centers the function of which is to develop, or at least to obtain, individualized lesson materials and to provide instruction by extension. At the elementary-school level—and it is to that phase of school work that this article particularly relates—one teacher generally instructs the pupil in all his work just as is commonly true in the resident school. The establishment of a state center in no way jeopardizes existing school-district organizations. These may well remain intact even where correspondence education is substituted for work in a regularly organized school. In the United States, with its strong and probably desirable traditions of district autonomy, it would not be wise for the correspondence center to deal directly with pupils without first obtaining the permission of the local school authorities. In districts where a regular school is maintained but where certain isolated or incapacitated children are to take their work by correspondence, close contact should be maintained with the local superintendent or teacher since such a resident representative may do much to motivate and encourage the pupils.

CONCLUSION

Have educators not been shortsighted, then, in their insistence that there are only two ways by which rural boys and girls may obtain an education, that is, by attending the one-room school or by attending the consolidated school? Equality of educational opportunity requires that discrimination no longer be made against children for whom transportation is not feasible and who live so far from the nearest school that they are seriously handicapped in obtaining an education. For these children, as well as for those who are physically incapacitated and cannot get to school, home-study courses during at least part of their school lives will do much to eliminate the inequality and the hardship that now prevail. Fortunately this solution is not unduly expensive. It is so inexpensive, in fact, that many one-room schools with small enrolments might better be discontinued and the pupils permitted to obtain their schooling at home. For the rural areas, then, schooling should mean the one-room school or consolidation *or home study*. To leave this last method unused is to deny their rightful educational opportunity to many thousands of boys and girls in the United States.

RELATION OF LACK OF ONE OR BOTH PARENTS TO SCHOOL PROGRESS

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PURPOSE OF THE STUDY

NO PROOF need be presented to support the thesis that environment affects school progress. If the lack of one or both parents in the home seriously affects school progress, educators must give to the children so handicapped special attention. In many large school districts the child-accounting system fails to record the fact of the lack of parents in the home. In even more districts no attempt is made to keep the information up to date.

The writer is a teacher in a large junior high school in a large city. In trying to discover reasons for the retardation of one of his pupils, he was brought forcibly to face with the fact that no record was kept which would reveal the lack of parents in the home of a pupil. This study was undertaken to find out to what extent such lack is a vital factor in school progress.

METHOD PURSUED

A questionnaire which asked the following four questions was given to every pupil: "(1) Is your father living? (2) Is your mother living? (3) Are you living with both parents? (4) If the answer to No. 3 is 'no,' with whom are you living?"

No child was compelled to answer if he did not wish to do so. About 90 per cent (1,625 pupils) of those present answered. There were 235 pupils who reported the absence of one or both parents in the home.

From the school records the following information was obtained: the intelligence quotient of each child, the amount of over-ageness for the grade, marks in co-operation assigned by the teachers, the number of failures in various subjects made by each pupil, the num-

ber of pupils who attained scholastic honors, histories of maladjustment cases handled by the school counselor, the number of pupils elected to school-government offices, and the number of reported physical defects for each child.

The group lacking parents and the remainder of the pupils in the school were compared with respect to the eight factors mentioned. When it was discovered that the group lacking parents had a lower median intelligence quotient than the other pupils in the school, a random sampling of pupils who as a group revealed the same median intelligence quotient was studied, every effort being made to keep conditions the same. The boys and girls in the group under investigation were matched with the exact number of boys and girls of the same grade and section with similar intelligence quotients. Three groups were thus created: Group A, pupils lacking parents; Group B, pupils who were of the same sex and had the same intelligence quotients as pupils in Group A but who lived with their parents; and Group C, the remainder of the student body. All the research and the tabulating were done by the writer.

INFORMATION SECURED

Briefly summarized, the findings are as follows: Of the 1,625 pupils who answered the questionnaire, 235 (14.5 per cent) or about one out of seven, lack one or both parents in the home. Detailed data with regard to the parent lost are given in Table 1. Of the 235 pupils lacking a parent, 62 per cent lack fathers compared with 29 per cent who lack mothers. The percentage of the pupils who lack fathers for reasons other than death (20.8) is over five times as great as the percentage who lack mothers for similar reasons (3.8).

Of the pupils who lack one or both parents, half live with their mothers alone, a sixth live with their fathers alone, a sixth live with one parent and a stepparent, and the remaining sixth live with various other persons.

The extent to which the lack of one or both parents affects school progress is shown in Table 2. Although the median intelligence quotient of the group lacking parents (Group A) is practically the same as that of the group matched with them (Group B), the percentage of over-ageness, the percentage of pupils receiving marks of

TABLE 1

DISTRIBUTION OF 235 CHILDREN LACKING PARENTS ACCORDING TO WHICH PARENT IS LACKING AND ACCORDING TO PERSONS WITH WHOM CHILDREN LIVE

	Number	Per Cent
Parent lacking:		
Father	146	62.1
Mother	68	29.0
Both	21	8.9
Total	235	100.0
Reason for lack of parent:		
Father dead	97	41.3
Mother dead	59	25.1
Father away	49	20.8
Both away	14	6.0
Mother away	9	3.8
Both dead	7	3.0
Total	235	100.0
Child lives with:		
Mother alone	118	50.2
Father alone	38	16.2
Father and stepmother	22	9.3
Mother and stepfather	18	7.7
Aunt	14	6.0
Guardian	14	6.0
Grandparents	9	3.8
Orphanage	1	0.4
Sister	1	0.4
Total	235	100.0

TABLE 2

SCHOOL PROGRESS OF GROUP A (235 PUPILS LACKING ONE OR BOTH PARENTS) OF GROUP B (235 PUPILS MATCHED WITH PUPILS IN GROUP A BUT POSSESSING BOTH PARENTS), AND OF GROUP C (REMAINDER OF STUDENT BODY)

Item Compared	Group A	Group B	Group C
Median intelligence quotience	109	109.5	114
Percentage of over-age pupils	24	10	14
Percentage of pupils marked "excellent" in co-operation	36	44	55
Percentage of pupils marked "good" in co-operation	41	40	27
Percentage of pupils marked "fair" in co-operation	19	14	15
Average number of failures per pupil	0.34	0.25	0.29
Percentage of pupils on honor roll	24	34	36
Percentage of pupils referred to counselor as special cases	9	4	6
Percentage of pupils elected to school-government offices	4	7	7
Average number of physical defects per pupil	2.2	1.4	1.9

only "fair" in co-operation, the number of failures, and the percentage of pupils receiving the attention of the school counselor are all greater in the case of Group A than in the case of Group B. The data for the remainder of the student body are even more unfavorable to the group lacking parents.

CONCLUSIONS AND RECOMMENDATIONS

There are more children who lack one or both parents than the average teacher supposes. To put it another way, every classroom row of pupils has a child who lacks one or both parents in the home. More children lack a father in the home than lack a mother. Children are more likely to live with their mother when lacking a father than to live with the father if the mother is lacking.

There appears to be some relation between retarded school progress and the lack of a parent in the home. The lack of one or both parents seems to affect every phase of school work unfavorably. Even if the difference between the groups is not large, the result always favors the groups with parents. It seems, in the school studied at least, that the lack of one or both parents in the home affects the child's intelligence quotient unfavorably, increases the amount of over-ageness, increases the number of failures in school subjects, decreases the likelihood of the child's becoming a leader in the school community, increases his chance of becoming a special problem case for the school counselor, and has some slight effect on health.

These findings indicate (1) that child-accounting systems should include a record of the presence or the lack of one or both parents in the home, (2) that this record should be corrected annually, (3) that further study should be made of this problem, and (4) that teachers should be made aware of the startling frequency with which this situation arises and the deleterious effects on school progress of the lack of one or both parents in the home.

URBAN AND RURAL ENROLMENT TRENDS

O. L. HARVEY
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*

IN TWO earlier articles in the *Elementary School Journal* the writer discussed national[1] and state[2] enrolment trends. The present article offers a consideration of urban-rural enrolment differences, by states and by grades. The basic data are presented in Tables 1 and 2, from which, however, preprimary and postgraduate pupils and pupils enrolled in the District of Columbia have been omitted.

From 1932 to 1936 urban-school enrolments in the forty-eight states taken as a whole decreased by 1 per cent, while rural-school enrolments increased by 2 per cent. Much variation exists, however, among the states. To indicate only the extreme cases, urban enrolments increased 9 per cent in South Dakota but decreased 50 per cent in Louisiana; rural enrolments increased 44 per cent in Rhode Island but decreased 14 per cent in New Mexico.

No definite regional trends are discernible.[3] If one may for the moment assume (as all educational data seem to suggest) that Maryland and West Virginia may be included in the Southeast, that region appears to manifest noticeably distinct characteristics in enrolment trends. Urban enrolments there exhibit a pronounced decline, while rural enrolments have sharply increased. This trend, however, is not characteristic of all states in this region. Similarly, although the states in the Middle region show, in general, a slight decline in rural and a correspondingly slight increase in urban enrolments, Illinois stands out as a fairly distinctive exception. Apart from Maryland and West Virginia, Rhode Island is the most

[1] O. L. Harvey, "Enrolment Trends and Population Shifts," *Elementary School Journal*, XXXVIII (May, 1938), 655–63.

[2] O. L. Harvey, "Enrolment Trends in Elementary School Grades, by States," *Elementary School Journal*, XXXIX (November, 1938), 200–211.

[3] The regions here referred to coincide with those of the National Resources Committee and are indicated in the tables.

marked exception in the Northeast, New Mexico in the Southwest, Utah in the Northwest, and Oregon in the Far West.

On the basis of such exceptional cases as these, it would appear doubtful that the difference between urban and rural enrolment trends is related to population shifts alone. State educational administrative policy would seem also to be involved. Indeed, the more carefully one scrutinizes the tables in detail, the more does the picture suggest state rather than regional trends. Some degree of homogeneity is suggested, as in such groups of adjoining states as Maryland, West Virginia, and Virginia; Florida, Georgia, and Alabama; North and South Dakota; and some of the Middle states. Even then, however, examination of the detail of trends by grades reveals that this apparent homogeneity is tenuous.

Examination of grade trends tends to support this conclusion. In both urban and rural areas total enrolments have declined in the first four grades, but the more rapidly in urban areas. Enrolments in Grade V decreased 4 per cent in urban areas but increased 2 per cent in rural areas. In all grades above Grade V enrolments have increased, but more markedly in rural than in urban areas.[1] This increase is particularly emphatic at the secondary level in rural areas. It would seem then that, in general, urban enrolments have decreased most noticeably in the lower grades and have increased slightly at the upper levels, while rural enrolments have declined less rapidly at the lower levels but have shown marked acceleration in the secondary grades.

This observation is interesting. It suggests that enrolments in urban areas have, in general, reached their peak in the elementary schools and are approximating the peak in the high schools. In rural areas, on the other hand, although the peak in elementary enrolments is not far distant, improvement in grading and promotion is still taking place in the first two grades, while expansion is taking place at the secondary level. If more extensive statistical data were available, it is not improbable that they would reveal in rural enrolments the tardy development of trends which already have had their effects on urban enrolments.

[1] The exception, Grade VIII, is in large part attributable to the fact that seven states, indicated in the tables by daggers, operate chiefly or entirely on the seven-four plan.

TABLE 1

PERCENTAGE INCREASE* IN URBAN-SCHOOL ENROLMENTS IN 1932–36, BY GRADES AND BY STATES

STATE	PERCENTAGE INCREASE IN GRADE												
	Total	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
United States	−1	−13	−12	−8	−6	−4	1	4	5	6	13	14	20
Far West:													
California	1	−10	−6	−2	2	−7	10	13	12	−3	−4	−1	6
Nevada	3	−7	−10	−5	3	−1	0	10	6	−5	26	10	23
Oregon	−4	−17	−13	−10	−12	−11	−3	−1	3	8	7	2	3
Washington	−4	−13	−10	−9	−10	−8	−7	0	3	2	2	5	−3
Northwest:													
Idaho	7	4	−3	2	5	2	13	5	4	18	11	14	19
Utah	−28	−19	−32	−31	−31	−30	−29	−50	−54	−30	−24	−16	80
Colorado	2	−8	−8	−8	−6	2	2	11	11	8	15	10	13
Wyoming	−7	−22	−22	−22	−12	−16	−8	2	−6	21	4	−7	24
Montana	−1	−23	−13	−19	−22	−16	−15	−9	17	26	50	60	49
North Dakota	8	14	−1	4	3	3	5	17	14	12	2	9	19
South Dakota	9	44	74	−5	−3	−3	5	8	10	17	14	4	15
Nebraska	−1	−11	−12	−8	−4	−4	4	7	6	2	13	−2	6
Kansas	−2	−34	−10	−3	−3	3	5	10	11	8	8	7	9
Middle:													
Missouri	4	−8	−6	−1	−1	6	11	21	6	−2	5	2	45
Iowa	3	−7	−7	−2	−3	−3	1	7	5	10	15	9	16
Minnesota	0	−11	−14	−9	−7	−6	0	5	0	10	10	13	18
Wisconsin	4	−10	−9	−5	−3	−1	3	7	4	10	14	14	21
Michigan	4	−4	−7	1	3	2	9	6	7	8	5	8	17
Illinois	−2	−19	−12	−9	−5	−5	−2	1	−1	9	11	22	35
Indiana	3	−4	−9	−6	−2	0	0	9	10	15	12	14	14
Ohio	1	−10	−11	−7	−3	−3	4	5	5	4	12	14	26
Northeast:													
Pennsylvania	1	−17	−14	−9	−7	−6	−4	2	6	15	24	23	31
New York	3	−9	−8	−7	−5	−5	−2	2	6	8	25	34	42
Maine	6	−5	−1	1	5	8	16	18	−1	2	17	9	21
New Hampshire	2	−14	−9	−12	−10	−6	−2	5	−3	11	17	27	58
Vermont	−3	−1	−10	1	−10	−14	−9	−9	−5	1	15	2	15
Massachusetts	0	−8	−13	−10	−9	−7	−5	2	4	5	17	20	26
Rhode Island	−3	−15	−15	−11	−7	−7	−4	7	8	0	21	16	−3
Connecticut	−3	−17	−17	−15	−8	−9	−8	4	−3	10	21	22	37
New Jersey	0	−19	−18	−15	−10	−10	−6	1	9	18	35	42	52
Delaware	2	−12	−6	−6	−5	−11	−9	−3	−5	10	31	39	35
Maryland†	−22	−21	−21	−22	−16	−22	−24	−26	−20	−25	−27	−29	−23
West Virginia†	−12	19	−9	−6	−5	−7	−4	−7	−10	−34	−42	−47	−43
Southeast:													
Kentucky	2	−11	−11	−9	−1	6	11	11	15	11	16	7	18
Tennessee	0	−21	−11	−5	−4	0	4	8	2	22	47	50	18
Virginia†	−10	−27	−24	−20	−12	−11	−10	−9	30	2	21	16	7
North Carolina†	1	−9	−5	−3	−6	4	26	16	‡	10	8	4	5
South Carolina†	4	−18	−12	−1	0	7	14	23	‡	20	38	22	21
Florida	−14	−18	−12	−6	−7	−13	−14	−5	−10	−20	−26	−27	−14
Georgia†	−30	−41	−39	−33	−35	−32	−23	−25	−15	−18	−17	−9	−18
Alabama	−13	−16	−22	−23	−14	−10	−8	−15	9	−4	−7	−17	−11
Mississippi	6	−9	−9	−2	3	4	16	18	16	23	26	30	32
Louisiana†	−50	−57	−58	−52	−49	−44	−43	−40	‡	−38	−43	−53	−50
Arkansas	11	3	4	9	11	12	17	15	17	21	12	9	15
Southwest:													
Oklahoma	0	−9	−9	−7	−7	0	2	10	13	7	9	13	6
Texas†	5	−9	−14	−4	1	10	49	19	‡	7	22	6	6
New Mexico	7	2	−2	1	17	6	10	19	12	7	13	3	11
Arizona	3	7	−4	−1	1	0	0	9	5	7	14	17	−18

[illegible] *States: 1930–1932* (United States Office of Education Bulletin No. 2, 1933) and Tables 39 and 40 in "Statistics of State School Systems, 1935–36," *Biennial Survey of Education in the United States: 1934–1936*, Vol. II (United States Office of Education Bulletin No. 2, 1937).

† In states marked with a dagger, most or all of the schools are on the seven-four plan.

‡ No enrolments in Grade VIII.

TABLE 2

PERCENTAGE INCREASE* IN RURAL-SCHOOL ENROLMENTS IN 1932–36, BY GRADES AND BY STATES

STATE	PERCENTAGE INCREASE IN GRADE												
	Total	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
United States	2	−8	−4	−2	−1	2	3	9	2	27	23	23	26
Far West:													
California	8	−25	−22	−18	−14	−13	−3	12	14	83	98	90	96
Nevada	−2	−14	−9	−7	1	−5	−5	2	1	44	−3	6	−6
Oregon	−13	−44	−19	−19	−22	−17	−17	−10	−7	3	15	16	16
Washington	−4	−12	−8	−8	−8	−8	−7	1	−11	18	19	23	−23
Northwest:													
Idaho	−1	−6	−3	−4	−6	−4	−9	−5	−6	1	14	21	29
Utah	31	39	20	16	18	20	25	49	66	−9	244	53	3
Colorado	−8	−16	−17	−15	−16	−14	−12	4	0	23	20	18	3
Wyoming	4	2	−3	−3	−3	0	6	16	5	13	14	3	17
Montana	−5	4	−6	−10	−7	−10	−10	−3	−20	−6	5	1	17
North Dakota	−8	−12	−8	−9	−10	−11	−11	−8	−13	3	1	1	5
South Dakota	−10	−22	−15	−16	−13	−13	−13	−8	−15	7	20	12	7
Nebraska	−8	−18	−14	−13	−12	−13	−7	−4	−11	3	4	15	14
Kansas	−4	6	−14	−17	−11	−8	−7	−6	1	9	12	5	2
Middle:													
Missouri	4	−19	5	13	9	33	−2	48	−9	20	−18	−2	−22
Iowa	−6	−4	−17	−13	−12	−11	−8	−4	−4	4	7	2	6
Minnesota	−5	−20	−11	−8	−7	−10	−5	−7	−3	23	28	12	26
Wisconsin	−6	−14	−11	−9	−4	−6	0	4	0	0	−12	−15	−13
Michigan	−8	−33	−28	−26	−23	−14	−12	−6	−13	83	56	54	117
Illinois	−13	−2	−16	−13	−20	−16	−14	−3	−11	−39	−5	0	7
Indiana	−1	−14	−7	−6	−2	−1	3	6	3	9	8	5	12
Ohio	−2	−17	−11	−9	−9	−6	−7	6	1	24	21	20	25
Northeast:													
Pennsylvania	0	−14	−11	−6	−7	−4	2	4	7	22	27	31	38
New York	3	−17	−14	−12	−11	−10	−6	−3	−6	24	86	103	112
Maine	1	−15	−11	−10	−6	−5	−7	16	43	34	2	5	3
New Hampshire	5	2	0	2	−1	−1	3	14	9	16	10	7	22
Vermont	5	−1	6	0	4	8	11	25	12	−13	−7	−9	13
Massachusetts	−4	−25	−5	−8	−5	6	22	−2	4	−9	−18	−7	2
Rhode Island	44	83	36	25	47	49	−5	72	94	47	−9	76	−12
Connecticut	−3	−12	−20	−20	−22	−16	−27	45	129	1	8	41	19
New Jersey	−4	−13	−16	−10	−10	−8	−5	1	2	−7	25	141	92
Delaware	3	−3	5	0	−8	−5	−13	3	5	61	73	7	22
Maryland†	35	18	20	23	24	28	34	49	123	70	67	68	78
West Virginia	14	−8	2	1	3	9	21	35	17	67	85	74	87
Southeast:													
Kentucky	3	−2	−5	−2	6	0	16	−4	3	22	28	4	28
Tennessee	2	−5	−1	2	4	5	6	8	5	22	0	2	24
Virginia†	6	−6	−4	−1	−1	9	18	25	‡	36	38	40	39
North Carolina†	3	−15	−3	−2	3	9	8	18	‡	35	33	31	29
South Carolina†	0	−10	1	0	0	2	5	10	‡	10	17	21	23
Florida	28	−29	18	19	27	39	47	57	66	118	313	208	136
Georgia†	13	−3	13	13	13	18	19	25	863	28	41	27	54
Alabama	12	7	12	9	7	8	8	27	25	38	36	44	21
Mississippi	4	12	0	2	4	2	0	−2	−2	1	0	−2	2
Louisiana†	34	−1	32	27	37	46	63	60	‡	70	86	21	179
Arkansas	1	−2	2	3	−2	−3	1	3	1	11	11	11	24
Southwest:													
Oklahoma	−3	−13	−10	−8	−5	−4	0	1	−1	17	12	15	15
Texas†	4	−7	−5	2	7	13	6	10	‡	22	6	18	40
New Mexico	−14	−29	−8	−10	−6	−9	−4	−3	−6	−13	−10	−9	−4
Arizona	7	−11	3	16	0	16	18	20	5	44	21	22	27

* Percentage increase was computed as follows: Enrolment in 1936 was determined as a percentage of [illegible] 1937).

† In states marked with a dagger most or all of the schools are on the seven-four plan.

‡ No enrolments in Grade VIII.

Examination of urban and rural enrolment trends by grades in the various states results in a confused impression, in which the following points are suggested but none is adequately confirmed:

1. In general, the individual states tend to reflect national trends. In other words, enrolments tend to decline throughout the earlier grades and to increase throughout the upper grades. These tendencies are particularly marked in the urban lower and the rural upper grades. There are, however, many marked exceptions. Urban enrolments in Grade II in South Dakota, for example, have increased 74 per cent, while rural twelfth-grade enrolments in Rhode Island have dropped 12 per cent.

2. Fluctuations from grade to successive grade in the same state are sometimes so eccentric as to suggest inaccurate statistical reporting, vagueness in grade definition, or the effects of some specific but unexplained administrative policy. Otherwise how account for such peculiarities as may be observed, by way of illustration, in rural and urban enrolments in Grade IX in Nevada, rural enrolments in Grade VI in Massachusetts, rural enrolments in Grade XI in Kentucky, urban enrolments in Grade XII in Utah, and urban enrolments in Grade VIII in Alabama? Obviously some of these apparent discrepancies are attributable to the smallness of the enrolment, but not all.

3. In a few states there would appear to have been a drastic shift in population from rural to urban centers, or vice versa, affecting not only the urban and the rural enrolments as totals but also the enrolment in each specific grade. Thus, in Utah rural enrolments have increased 31 per cent, while urban enrolments decreased 28 per cent, and correspondingly large changes are evident in the constituent grades. The same kind of phenomenon occurs in Rhode Island, in which, however, individual grade variations are less consistent with the total than they are in Utah. Maryland and several states in the Southeast, such as Louisiana, present profiles like that for Utah. West Virginia's is more erratic, like that for Rhode Island. The most interesting illustration in this series is New Mexico, in which—the very reverse of the trends mentioned here—there has been a consistent increase in urban grades even at the secondary level with corresponding loss of enrolments in rural

)ver-all grade-enrolment shifts such as these strongly sug-
probability of urban-rural or rural-urban migration within
s indicated. Why such "migration" should so frequently
d to relatively isolated states, and not be reflected in sur-
regions, is a problem which can be answered only after
ailed analysis on the basis of much information relating to
on movements and educational administrative policy.

ne states reveal a gradual shift in percentage change from
e to the next, with a relatively limited range of variation.
ith minor exceptions, urban enrolments in Pennsylvania
l enrolments in Oklahoma progress fairly smoothly from a
crease in Grade I through to a relatively slight increase in
II. In other states, such as urban Illinois or rural Minne-
: trend is similarly gradual but with a more pronounced
sulting in a profile which may be represented by an exag-
U. Variations of this general profile are to be found else-
ielding *J*-shaped curves, suggesting that the point of great-
a lies toward either the lower or the upper end of the grade
any states, on the other hand, present *V*-shaped profiles.
:al, however, the phenomenon is found to be repeated
out the states: the profiles are variants of the national pro-
with greater or less degree of exaggeration, distortion, or
ess.

umming-up and interpretation of the evidence relating to
parison between urban and rural enrolment trends from
1936, the following tentative conclusions may be suggested:
s probable that shifts in population structure are affecting
school enrolments. If so, the influence of this factor is more
ced in urban than in rural areas. There are, however,
exceptions to this generalization.

e demand for higher educational qualifications, possibly in
tion with the relative dearth of employment opportunities
h, is presumably resulting in increased secondary-school en-
s. The influence of this factor is particularly pronounced in
as. There are also marked exceptions to this generalization.
velopments in rural enrolments give the impression that
: the delayed recapitulation of urban enrolment develop-

ments of earlier years but somewhat accelerated by the effects of recent social and economic trends and, therefore, exaggerated in form.

4. Although well-defined regional trends are not clearly apparent, there is some suggestive evidence of subregional homogeneity, especially in the Southeast. To this extent the evidence suggests the influence of major social, demographic, and economic factors.

5. The egregious behavior of enrolment trends in several individual states, on the contrary, suggests that educational administrative practices are still potent enrolment determinants. Such administrative practices would seem to be especially significant in the existing differences between urban and rural enrolment developments.

6. For an adequate understanding of enrolment trends it is obviously not enough to report state totals. Rural and urban categories are essential. As the writer has demonstrated in another article,[1] negro and white data are also necessary. All the evidence clearly indicates the importance of grade data, and the significance of age-grade distributions, concerning which little is known, becomes more and more evident. In view of the projected population census of 1940, it would prove of inestimable value if school administrators could see their way clear to prepare and publish, for at least that particular year, a complete analysis of school enrolments in their respective states, in urban and rural areas and by color, grade, and age. If similar data relating to private schools could be provided, the most comprehensive analysis of school enrolments to date would be possible.

[1] O. L. Harvey, "Negro Representation in Public School Enrolments," *Journal of Negro Education*, VIII (January, 1939), 26–30.

SELECTED REFERENCES ON PRESCHOOL AND PARENTAL EDUCATION

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THIS bibliography covers the period from December 1, 1937, to December 1, 1938. As in preceding years the following classes of books and articles have been omitted: (1) foreign-language publications, (2) textbooks and reviews, and (3) popular articles containing little new material. An attempt has been made to list the most important publications of the year in the field covered, but it is probable that some unintentional oversights have occurred.

TECHNICAL AND EXPERIMENTAL STUDIES[1]

121. ANDRUS, RUTH, and HOROWITZ, EUGENE L. "The Effect of Nursery School Training: Insecurity Feelings," *Child Development*, IX (June, 1938), 169–74.

Low positive correlations were found between length of time spent in nursery school and feelings of insecurity as rated by teachers.

122. BARUCH, DOROTHY WALTER. "A Study of Reported Tension in Interparental Relationships as Co-existent with Behavior Adjustment in Young Children," *Journal of Experimental Education*, VI (December, 1937), 187–204.

A number of factors in the marital relations of parents as reported by themselves were found to be significantly related to the adjustments of their children as observed in the nursery school.

123. BAYLEY, NANCY, and JONES, HAROLD E. "Environmental Correlates of Mental and Motor Development: A Cumulative Study from Infancy to Six Years," *Child Development*, VIII (December, 1937), 329–41.

No correlations were found between various environmental indexes and mental-test scores previous to the age of eighteen months. Thereafter correlations increase sharply, reaching a maximum during the third year of life. Theoretical implications are discussed.

[1] See also Item 650 (Sowers) in the list of selected references appearing in the November, 1938, number of the *Elementary School Journal*.

124. BERNHARDT, KARL S., MILLICHAMP, DOROTHY A., CHARLES, MARION W., and MCFARLAND, MARY P. *An Analysis of the Social Contacts of Preschool Children with the Aid of Motion Pictures.* University of Toronto Studies, Child Development Series, No. 10. Toronto, Canada: University of Toronto Press, 1937. Pp. 54.

Fifteen day-nursery children between the ages of two and four years were observed individually for ten-minute periods once a month over a period of four months. Although increase in chronological age showed no clear-cut quantitative relation to social behavior, marked qualitative changes in the form and the pattern of social reactions were observed. These changes involved both the dropping-out of earlier responses and the addition of new forms of reaction.

125. BIJOU, S. W. "The Performance of Normal Children on the Randall's Island Performance Series," *Journal of Applied Psychology*, XXII (April, 1938), 186–91.

In spite of the fact that these tests were standardized for low-grade mental defectives, they may be successfully used with normal children of preschool age without modification of procedure or norms.

126. CAMERON, NORMAN. "Individual and Social Factors in the Development of Graphic Symbolization," *Journal of Psychology*, V (January, 1938), 165–84.

A study of the interrelations between graphic symbolization as shown in drawings and the development of verbal language and group organization in young children.

127. DENNIS, WAYNE. "Historical Notes on Child Animism," *Psychological Review*, XLV (May, 1938), 257–66.

Shows that Piaget's views on child animism were expressed in practically identical form by many earlier psychologists and philosophers.

128. DENNIS, WAYNE. "Infant Development under Conditions of Restricted Practice and of Minimum Social Stimulation: A Preliminary Report," *Pedagogical Seminary and Journal of Genetic Psychology*, LIII (September, 1938), 149–57.

No clear evidence of retardation was apparent in two infants reared in a very limited environment. The conclusion is that within the first year the infant will "grow up" of himself.

129. DREXLER, ETHEL NATALIE. "A Study of the Development of the Ability To Carry a Melody at the Preschool Level," *Child Development*, IX (September, 1938), 319–32.

Describes a simple and a fairly objective method for evaluating the ability of a child to carry a melody. Gives the results of applying the method to twenty-three cases between the ages of three and six years.

130. DUBNOFF, BELLE. "A Comparative Study of Mental Development in Infancy," *Pedagogical Seminary and Journal of Genetic Psychology*, LIII (September, 1938), 67–73.

A comparison of the mental development of infants in Soviet Russia with that of the California infants studied by Nancy Bayley by means of the California First-Year Mental Scale (*Mental Growth during the First Three Years*. Genetic Psychology Monographs, Vol. XIV, No. 1. Worcester, Massachusetts: Clark University Press, 1933).

131. FRANK, ALMA. "A Study in Infant Development," *Child Development*, IX (March, 1938), 9–26.

Shows that the muscular responses of infants who are "put through" a motor act by adults are observably different from those occurring when the act is spontaneously performed by the child himself. In the former cases the muscular contractions are localized and jerky and show much rigidity and tension; in the latter they are smooth running and integrated with each other and give the appearance of flexibility and ease.

132. GESELL, ARNOLD, and THOMPSON, HELEN, assisted by CATHERINE STRUNK AMATRUDA. *The Psychology of Early Growth*. New York: Macmillan Co., 1938. Pp. x+290.

Provides further normative standards on various aspects of infant development.

133. GOLDSTEIN, KURT. "A Further Comparison of the Moro Reflex and the Startle Pattern," *Journal of Psychology*, VI (July, 1938), 33–42.

Regards the startle pattern as a later form of reaction occurring in infants only after the nervous system has reached a given degree of maturity, whereas the Moro reflex is a primitive response and as such an expression of neurological immaturity.

134. GOODENOUGH, FLORENCE L. "The Use of Pronouns by Young Children: A Note on the Development of Self-Awareness," *Pedagogical Seminary and Journal of Genetic Psychology*, LII (June, 1938), 333–46.

Although the total percentage of pronouns in records of spontaneous language behavior of young children shows little change with age after the age of three, certain specified groups of pronouns show marked changes with age and with the conditions of observation.

135. GRIDLEY, PEARL FARWELL. *Graphic Representation of a Man by Four-year-old Children in Nine Prescribed Drawing Situations*. Genetic Psychology Monographs, Vol. XX, No. 2. Provincetown, Massachusetts: Journal Press, 1938. Pp. 183–350.

The four-year-old child is able to make some modifications of his drawing in response to verbal instruction from an adult.

136. HATTWICK, LABERTA A. "Sex Differences in Behavior of Nursery School Children," *Child Development*, VIII (December, 1937), 343–55.

A study of 579 children between the ages of two and four years shows that boys exceed girls in frequency of aggressive, extroverted behavior, undesirable work habits, speech defects, and handling genitals. Girls exceed boys in withdrawing, introverted tendencies, twisting hair, and refusing food. Within the ages studied, sex differences showed little or no relation to increasing age.

137. HATTWICK, LABERTA A., and SANDERS, MOLLIE KROM. "Age Differences in Behavior at the Nursery School Level," *Child Development*, IX (March, 1938), 27–47.

A statistical summary of the behavior difficulties most characteristic of each half-year age level from two to four years.

138. HERRING, AMANDA. "An Experimental Study of the Reliability of the Bühler Baby Tests," *Journal of Experimental Education*, VI (December, 1937), 147–60.

Although the correlation between odd and even items on single tests is reasonably high, that between scores on tests given during the early and the late months of the first year is very low. This finding corroborates others on the same topic in showing that infant tests are not dependable indexes of later mental status.

139. HONZIK, MARJORIE PYLES. "The Constancy of Mental Test Performance during the Preschool Period," *Pedagogical Seminary and Journal of Genetic Psychology*, LII (June, 1938), 285–302.

Constancy of the intelligence quotient varies with the age of the child at the first test and the interval between testings. Tests given before the age of two are of negligible significance for predicting mental level at the age of six or later.

140. HONZIK, MARJORIE P., and JONES, HAROLD E. "Mental-physical Relationships during the Preschool Period," *Journal of Experimental Education*, VI (December, 1937), 139–46.

Seriatim study of 252 children between the ages of twenty-one months and seven years shows a low positive correlation between mental and physical measurements at all ages. The correlation between mental measurements and measurements of socio-economic status increases with age, but the relation of the latter to physical status does not vary with age.

141. HULL, CLARK L. "The Goal-Gradient Hypothesis Applied to Some Field-Force Problems in the Behavior of Young Children," *Psychological Review*, XLV (July, 1938), 271–99.

A theoretical consideration of some of the typical problems in child behavior that have been explored by Lewin, with a reinterpretation and derivation of laws of behavior on the basis of the goal-gradient hypothesis.

142. HUNT, WILLIAM A., and LANDIS, CARNEY. "A Note on the Difference between the Moro Reflex and the Startle Pattern," *Psychological Review*, XLV (May, 1938), 267–69.

Contrary to the statements of Pratt and of Peifer, the startle pattern is not identical with the Moro reflex. The startle pattern is essentially a flexion response, while the Moro is chiefly an extension response.

143. JENSS, RACHEL M., and BAYLEY, NANCY. "A Mathematical Method for Studying the Growth of a Child," *Human Biology*, IX (December, 1937), 556–63.

Presents a mathematical formula for studying growth, by means of which growth in different functions may be directly compared.

144. JERSILD, ARTHUR T., and FITE, MARY D. "Children's Social Adjustments in Nursery School," *Journal of Experimental Education*, VI (December, 1937), 161–66.

Although it is probable that attendance at nursery school may have some generalized effect on the social adjustment of children, much of the apparent improvement appears to be merely a carrying-over of specific reactions to individual companions in a specific situation.

145. JERSILD, ARTHUR T., and RITZMAN, RUTH. "Aspects of Language Development: The Growth of Loquacity and Vocabulary," *Child Development*, IX (September, 1938), 243–59.

There is a definite slowing-up in the rate of gain in language skills after the age of three and a half years. The correlation between intelligence quotient and language development is higher for children under three than for those between three and four.

146. JOHNSON, BUFORD. "Development of Thought," *Child Development*, IX (March, 1938), 1–7.

Comparison of the patterns of performance of preschool children and college students in the solving of unfamiliar problems suggests that the similarities between the two groups in the formation of new concepts outweigh the differences but that the children are somewhat less hidebound by traditional forms of response and thus more ready to profit by experiences which are favorable for the development of thought.

147. KATZ, EVELYN. *Some Factors Affecting Resumption of Interrupted Activities by Preschool Children.* Institute of Child Welfare Monograph No. 16. Minneapolis, Minnesota: University of Minnesota Press, 1938. Pp. x+52.

An experiment designed to test Lewin's theory that activities interrupted before their completion are likely to be resumed in spite of the presence of competing stimuli. The results conform to the Lewin hypothesis in a marked degree.

148. KUBO, YOSHIHIDE. "The Behavior Inventories and Examinations of Japanese Children," *Pedagogical Seminary and Journal of Genetic Psychology*, LIII (September, 1938), 87–99.

Presents a series of developmental items suitable for each of eleven age levels from four months to six years and gives the percentage of Japanese children succeeding with each item.

149. LODGE, TOWNSEND. "Variation in Stanford-Binet I.Q.'s of Preschool Children According to the Months in Which Examinations Were Given," *Journal of Psychology*, VI (October, 1938), 385–95.

Greater gains were shown during the period from autumn to spring than during the period from spring to autumn regardless of nursery-school attendance or nonattendance.

150. McCaskill, Carra Lou, and Wellman, Beth L. "A Study of Common Motor Achievements at the Preschool Ages," *Child Development*, IX (June, 1938), 141–50.

Describes a series of motor tests suitable for preschool children and reports results obtained from administration of the tests to ninety-eight cases between the ages of two and six years.

151. McDowell, Marion Sill. "Frequency of Choice of Play Materials by Preschool Children," *Child Development*, VIII (December, 1937), 305–10.

Materials used in constructing other objects ranked first in popularity; those involving manipulative skill of small muscles, second.

152. McFarland, Margaret B. "Relationships between Young Sisters as Revealed in Their Overt Responses," *Journal of Experimental Education*, VI (December, 1937), 173–79.

Reactions such as rivalry, protection, sympathy, etc., were recorded and analyzed for twenty pairs of sisters of preschool age who were observed simultaneously in their homes.

153. McGraw, Myrtle B. "Quantitative Behavior Data and the Longitudinal Method: The Moro Reflex," *Human Biology*, IX (December, 1937), 542–48.

By means of an analysis of the developmental change in the Moro reflex in individual cases, the author demonstrates certain advantages of the longitudinal method as contrasted with the cross-sectional study of large groups.

154. Moore, Sallie Beth. "The Use of Commands, Suggestions, and Requests by Nursery School and Kindergarten Teachers," *Child Development*, IX (June, 1938), 185–201.

In the schools studied the number of commands decreased with advancing age and intelligence of the children, while the number of suggestions and requests increased.

155. Nelson, Virginia Lafayette, and Richards, T. W. "Studies in Mental Development: I. Performance on Gesell Items at Six Months and Its Predictive Value for Performance on Mental Tests at Two and Three Years," *Pedagogical Seminary and Journal of Genetic Psychology*, LII (June, 1938), 303–25.

By means of a correlation analysis, certain items were selected from the Gesell schedules and compared with scores at six months and scores on the Merrill-Palmer and the Stanford-Binet test at two and three years.

156. Peiper, Albrecht. "Comments upon J. M. Smith's Work, 'The Relative Brightness Values of Three Hues for Newborn Infants' " (translated by Karl C. Pratt), *Child Development*, VIII (December, 1937), 299–300.

A reply to Josephine M. Smith's criticism ("The Relative Brightness Values of Three Hues for Newborn Infants," *Studies in Infant Behavior*, III, 91–140. University of Iowa Studies in Child Welfare, Vol. XII, No. 1. Iowa City, Iowa:

University of Iowa, 1936) of Peiper's claim that the Purkinje phenomenon can be observed not only in newborn infants in general but even in infants prematurely born. States that Smith has misunderstood his method of computing relative brightness values and that a small number of cases was sufficient since every child reacted in essentially the same manner.

157. POULL, LOUISE E. "The Effect of Improvement in Nutrition on the Mental Capacity of Young Children," *Child Development*, IX (March, 1938), 123–26.

Forty-one children between the ages of two and seven years whose nutritional status was originally "poor" were retested after an average interval of three and a half years during which nutrition had been raised to "good." A mean increase of ten points in the intelligence quotient of this group is compared with no increase for a control group whose nutritional status was unchanged.

158. REDFIELD, JANET E., and MEREDITH, HOWARD V. "Changes in the Stature and Sitting Height of Preschool Children in Relation to Rest in the Recumbent Position and Activity Following Rest," *Child Development*, IX (September, 1938), 293–302.

A temporary increase in standing and sitting height equivalent to two months of normal growth was found to take place in four-year-old children as a result of the afternoon nap.

159. RHODES, ADELE. "A Comparative Study of Motor Abilities of Negroes and Whites," *Child Development*, VIII (December, 1937), 369–71.

Eighty negro children between the ages of two and five years were given the series of motor tests reported in a previous article by Goodenough and Smart ("Interrelationships of Motor Abilities in Young Children," *Child Development*, VI [June, 1935], 141–53). Neither in respect to the weights brought out by a factor analysis nor the mean performance of the different age groups were any significant race differences established.

160. RICHARDS, T. W., and NELSON, VIRGINIA LAFAYETTE. "Studies in Mental Development: II. Analysis of Abilities Tested at the Age of Six Months by the Gesell Schedule," *Pedagogical Seminary and Journal of Genetic Psychology*, LII (June, 1938), 327–31.

A factor analysis of scores made by six-month-old infants on seventeen items of the Gesell schedules indicated that at least three factors, tentatively designated as "testability," "alertness," and "motor ability," are required to account for the correlations involved.

161. RICHARDS, T. W., and NEWBERY, HELEN. "Studies in Fetal Behavior: III. Can Performance on Test Items at Six Months Postnatally Be Predicted on the Basis of Fetal Activity?" *Child Development*, IX (March, 1938), 79–86.

Mothers' reports of fetal activity during the last two months of prenatal life were found to show a high correlation with the scores earned by the children on the Gesell developmental schedules at the age of six months. Possible reasons for this relationship are discussed.

162. ROBERTS, KATHERINE ELLIOTT, and BALL, RACHEL STUTSMAN. "A Study of Personality in Young Children by Means of a Series of Rating Scales," *Pedagogical Seminary and Journal of Genetic Psychology*, LII (March, 1938), 79–149.

Describes a series of rating scales to be used by teachers and parents in analyzing nine aspects of the personality of the preschool child. Gives results of the application of the scales to children in the Merrill-Palmer nursery school.

163. SKEELS, HAROLD M. "Mental Development of Children in Foster Homes," *Journal of Consulting Psychology*, II (March–April, 1938), 33–43.

A study of 147 cases placed in foster-homes before the age of six years showed no relation either between the intelligence quotients of these children in early childhood and the mental status of their true parents or between the intelligence of the children and the level of the education of either the true or the foster-parents.

164. SKODAK, MARIE. "The Mental Development of Adopted Children Whose True Mothers Are Feeble-minded," *Child Development*, IX (September, 1938), 303–8.

Mental tests of sixteen children whose true mothers were feeble-mineded indicated no mental retardation at the ages of two and four years, after placement in foster-homes.

165. SMITH, JOSEPHINE M. "Reply to Peiper," *Child Development*, VIII (December, 1937), 301–4.

In reply to Peiper (Item 156 in this list), Smith defends the use of the statistical average rather than more exhaustive study of a small number of cases on the ground that individual differences are too great to warrant generalizations when only two cases are studied.

166. SNYGG, DONALD. "The Relation between the Intelligence of Mothers and of Their Children Living in Foster Homes," *Pedagogical Seminary and Journal of Genetic Psychology*, LII (June, 1938), 401–6.

A negligible correlation was found between the intelligence quotients of 312 children of preschool age who had been placed in foster-homes in infancy or early childhood and the intelligence quotients of their true mothers.

167. SONTAG, L. W., and RICHARDS, T. W. *Studies in Fetal Behavior: I. Fetal Heart Rate as a Behavioral Indicator*. Monographs of the Society for Research in Child Development, Vol. III, No. 4 (Serial No. 17). Washington: Society for Research in Child Development, National Research Council, 1938. Pp. x+72.

With increasing age, fetal heartbeat decreases in rate but becomes more variable and more responsive to external conditions experimentally introduced.

168. STODDARD, GEORGE D. "Contributions to Education of Scientific Knowledge about Mental Growth and Development," *The Scientific Movement in Education*, pp. 421–34. Thirty-seventh Yearbook of the National So-

ciety for the Study of Education, Part II. Bloomington, Illinois: Public School Publishing Co., 1938.

Research shows that intelligence is not fixed but is affected by environmental stimulation.

169. *Studies in Preschool Education, I.* University of Iowa Studies in Child Welfare, Vol. XIV. Iowa City, Iowa: University of Iowa, 1938.

Part I of this bulletin, "Child Development and Preschool Education," by Ruth Updegraff, outlines the aims of nursery-school education and discusses their relation to known principles of child development. In Part II, "The Behavior of Young Children in Failure," Mary Elizabeth Keister reports that a training program in which young children were introduced to progressively more difficult tasks was found to induce more prolonged effort on the part of the subjects and to lessen such ineffective types of behavior as crying and sulking. Part III, "The Effect of Training upon Singing Ability and Musical Interest of Three-, Four-, and Five-year-old Children," by Ruth Updegraff, Louise Heiliger, and Janet Learned, shows that children who were given special musical training demonstrated not only greater improvement in ability to sing than did a control group without such training but also increased desire to participate in musical activities. In Part IV, "An Objective Method for Recording Three- and Four-year-old Children's Enjoyment of Stories, Particularly Applied to a Study of Fanciful and Realistic Stories," Marjorie Mantor selected, by means of controlled observations, certain criteria for use in indicating degree of enjoyment. Part V, "Literature for Two-year-old Children," is an analytical study, by Eleanor A. Lack, of the kinds of stories preferred by two-year-olds. In a study reported by Theresa J. Peterson in Part VI, "A Preliminary Study of the Effects of Previous Nursery School Attendance upon Five-year-old Children Entering Kindergarten," no statistically dependable differences were found in the mental characteristics of children who had previously attended a nursery school and those who had not.

170. SWAN, CARLA. *Individual Differences in the Facial Expressive Behavior of Preschool Children.* Genetic Psychology Monographs, Vol. XX, No. 4. Provincetown, Massachusetts: Journal Press, 1938. Pp. 557–650.

Individual differences in patterns of expressive behavior were found to be related to body build, age, hour of the day, intelligence, and type of activity engaged in.

171. WAGNER, ISABELLE F. "The Body Jerk of the Neonate," *Pedagogical Seminary and Journal of Genetic Psychology*, LII (March, 1938), 65–77.

There is no clear distinction between the body jerk and the so-called "startle reflex." Body jerks are most frequent in sleep, general stirs when awake.

172. WELLMAN, BETH L. *The Intelligence of Preschool Children as Measured by the Merrill-Palmer Scale of Performance Tests.* University of Iowa Studies in Child Welfare, Vol. XV, No. 3. Iowa City, Iowa: University of Iowa, 1938. Pp. 150.

A critical analysis of relationships between the Merrill-Palmer test and tests of the Binet type as applied to children of nursery-school age.

173. WELLMAN, BETH L. "Mental Growth from Preschool to College," *Journal of Experimental Education*, VI (December, 1937), 127–38.

Presents data that appear to show that attendance at nursery school has an accelerating effect on mental growth, which is still evident at the college level.

NONTECHNICAL BOOKS AND ARTICLES PRIMARILY FOR PARENTS TEACHERS, AND WORKERS IN THE FIELD OF PARENT EDUCATION

174. BAIN, WINIFRED. "Problems of Home-School Relationships in Nursery School and Kindergarten," *Parent Education*, IV (February, 1938), 123–27.

Discusses the particular responsibilities of parent and teacher in the training of young children.

175. BLATZ, WILLIAM E. *The Five Sisters*. New York: William Morrow & Co., 1938. Pp. xii+210.

An account of the development and the training of the Dionne quintuplets. The book is illustrated by many photographs and charts.

176. BORGESON, GERTRUDE M. "Teachers Techniques in the Nursery School Luncheon Period," *Journal of Experimental Education*, VI (December, 1937), 167–72.

Describes the techniques actually used by teachers in two nursery schools in which both the training of the teachers and the social background of the children differed greatly. Fewer problems were encountered in the superior school —a fact that is attributed in part to the better home background of the children and in part to better handling by the teachers. Suggestions for handling feeding problems are given.

177. CLOTHIER, FLORENCE. "The Social Development of the Young Child," *Child Development*, IX (September, 1938), 285–91.

A discussion, illustrated by case histories, of the evolution of social behavior during the first six years.

178. DIXON, C. MADELEINE. *High, Wide and Deep*. New York: John Day Co., 1938. Pp. xx+300.

This book for parents and teachers is subtitled "Discovering the Preschool Child." The first of the two parts is based on observations made in a summer play group for children of preschool age, the second on observations of children in their homes.

179. FRANK, LAWRENCE K. "The Fundamental Needs of the Child," *Mental Hygiene*, XXII (July, 1938), 353–79.

Discusses the manner in which the child's fundamental drives may be brought into harmony with the rules imposed by society.

180. GESELL, ARNOLD. "The Psychological Hygiene of Infant Feeding," *Mental Hygiene*, XXII (April, 1938), 216–20.

Emphasizes the need of allowing for individual differences in planning and managing the infant's feeding schedule.

181. HURLOCK, ELIZABETH B. *Modern Ways with Babies*. Philadelphia: J. B. Lippincott Co., 1937. Pp. viii+348.

A book for parents describing the normal course of mental and physical development during the first three years of life, together with detailed advice on the care and the training of infants.

182. KAWIN, ETHEL. *The Wise Choice of Toys*. Chicago: University of Chicago Press, 1938 (second edition). Pp. x+154.

A book for parents and teachers, describing the kinds of toys suitable for children at each level of development.

183. UPDEGRAFF, RUTH; DAWE, HELEN C.; FALES, EVALINE E.; STORMES, BERNICE E.; and OLIVER, MARY G. *Practice in Preschool Education*. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xvi+408.

A book on the education of young children based on the curriculum and the theories of the University of Iowa nursery schools.

184. ZECHLIN, RUTH. *How To Play with Your Child*. New York: Barrows Mussey, Inc., 1937. Pp. 128.

Games and toys suitable for children of different ages are described.

Educational Writings

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REVIEWS AND BOOK NOTES

PROGRESSIVE EDUCATION IN A LARGE CITY SCHOOL SYSTEM.—Twenty-five years ago progressive education was largely limited to small experimental private schools. Those were the days when the term "lock-step schooling" could be correctly applied to most classroom procedures. Desks and chairs were screwed to the floor; children sat at attention until permitted to speak or move; uniform lessons were assigned from day to day; and the major effort appeared to be to secure as much uniformity as was humanly possible. Instruction was largely either by eye or by ear instead of through experience. The precepts of John Dewey and the practical endeavors of men like Francis Parker, Frederic Burk, and Stanwood Cobb to develop a new way of teaching children in terms of a more liberal educational philosophy were pioneer efforts.

Here and there small private schools were organized in which teachers and pupils endeavored to chart a new path in education. These schools were small for several reasons. First, it required a courageous parent to trust his offspring to these newer experimental institutions. Second, it required a courageous teacher to undertake a liberal program, and the number of children with whom she worked had to be limited. The methods were, therefore, developed and refined for groups of twelve, fifteen, or twenty pupils.

Washburne, at Winnetka, was probably the first man to apply progressive techniques to a typical public-school situation with thirty children in a room. Since his start elementary-school teachers from one end of the land to the other have gradually adopted and adapted the techniques to typical public-school conditions. Despite the extent to which these newer practices have spread during the past decade, there are still thousands of public-school teachers who wonder how these better procedures may be made to operate in an ordinary public school.

Assistant Superintendent Lane, of the Los Angeles schools, and his co-authors, Miss Allison, Miss Bishop, and Mrs. McNary, have told in practical fashion[1] just how the practices of progressive education have been effectively incorporated in some of the public schools of Los Angeles. Their book deals simply with the educational philosophy behind the newer educational practices and, step by step, shows how this philosophy can be expressed in public-school

[1] Robert Hill Lane, with Gertrude M. Allison, Ethelyn Bishop, and Dorothy Johns McNary, *The Progressive Elementary School: A Handbook for Principals, Teachers, and Parents.* Boston: Houghton Mifflin Co., 1938. Pp. x+198+xii. $1.90.

practice in a large urban system. Not only do they offer suggestions as to what to do and how to do it, but they offer exceedingly valuable warnings as to what not to do. With all that is now being said about units of work, it is refreshing to find in their volume the statement that "it is a fatal mistake for a teacher to feel that a major interest must be going on in her room at all times in all fields and that she must always have a unit of work under way with which to control that interest" (p. 82).

While the volume is somewhat uneven in quality and unity, it is alive and readable. It should be a valuable help to teachers who are wondering what this newer education is all about. It should be useful also to school administrators who are seeking something concrete to place in the hands of their teachers which will help stimulate thinking with regard to newer educational practice.

WILLARD W. BEATTY

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A MODERN ELEMENTARY SCHOOL IN ACTION.—An interesting and detailed report is available on the evolution of a curriculum of the unit-of-work and activity type in a typical urban public school. The volume[1] has grown from the experience of an administrator and teachers who work with children of normal and below-normal academic aptitude, about 30 per cent of whom have foreign-born parents. The report differs from similar previous reports in that it deals with pupils in a typical urban public-school situation rather than with pupils in a favored suburban community or in a private school. By the use of photographs, narratives, and samples of the children's original work, a large number of actual classroom situations are presented to the readers with a detail and clarity approximating impressions gained from direct observation. Detailed step-by-step descriptions are provided, showing how a new curriculum may be introduced into the ordinary public school.

In organization and content the book is divided into two parts. In the first part both pupil and teacher personnel are comprehensively described, and the philosophy and the curriculum are presented in general terms. Such integrating influences as clubs, assemblies, traffic squad, school newspaper, and musical organizations are depicted. This part is concluded with an evaluation, mainly subjective in nature, of the school's success, judged by such criteria as the children's fondness for school, their competence in academic skills, achievements in creative expression, gains in weight, school citizenship, and their subsequent success in secondary-school subjects.

In the second part are detailed descriptions of three units, namely, "The Study of Animals," "Community of San Jose," and "European Architecture." Each unit is introduced by a narrative account of the origin and the develop-

[1] Albion H. Horrall, Lydia E. Codone, Mabel S. Willson, and Leah Smith Rhodes, *Let's Go to School: Integrative Experiences in a Public Elementary School.* New York: McGraw-Hill Book Co., Inc., 1938. Pp. xii+434. $3.00.

ment of the unit, including stenographic reports of the pupils' planning and selected samples of pupils' creative expression. Subject matter and methods in each unit are organized and discussed by the authors under four headings: "Producers' enterprises," "Consumers' enterprises," "Problem-solving enterprises," and "Specific learning enterprises." Under "Producers' enterprises" are detailed explanations of the materials and the methods used in making scenery, maps, pictorial borders, and costumes, and in reproducing written materials, producing marionette shows, and the like. "Consumers' enterprises" include records of typical class discussions, bibliographies of stories enjoyed by the children, bibliographies of phonograph and song selections, lists of visual aids, and reports of interviews with persons as these relate to each unit. "Problem-solving enterprises" include pupil-teacher planning of the unit of work and a more or less logical organization of the subject matter of the unit. "Specific learning enterprises" include a summary of specific work and study skills which pupils have practiced in the unit.

Accounts of units are written in the teacher's idiom in clear, direct, and simple fashion. Practices are illustrated by photographs, teachers' logs of activities, pupil products in drawing and writing, and stenographic records of class discussions.

This volume has certain limitations, one of which is the avoidance of any explicit discussion of the postulates of the newer educational practices. At times the authors indulge in the use of verbal "fictions," such as the abstraction which appears on pages 22 and 78 that the ultimate goal of modern education is "to make human personality." The meaning of this educational goal or "fiction" is not defined by activities or functions; hence, for the reader it lacks definitive content. On page 117 certain questionable assumptions and statements about evaluation are made, which seem more an apology for the type of evaluation used by the authors than an up-to-date statement of progressive evaluation practices.

Although the objectives of elementary education formulated in a bulletin of the California State Department of Education are accepted as the basis for the reconstructed curriculum, no attempt is made to judge the success of the new curriculum in terms of these objectives.

The evaluation data are often not convincing. Fondness for school, for example, is judged by such evidence as lack of truancy, lack of interest among boys in free tickets to a college football game when school-club activities were in session, and the fact that children wanted to work in the classroom after school hours. Health is judged by the criterion of average gain in weight, with which the school may have had little or no direct connection. This same evidence might be gathered by traditional schools and used to show the excellence of their curricular practices. More convincing evidence, however, is submitted on achievement in the three R's and in creative music, drawing, and writing.

This book may well serve as a guide for those in public schools who wish to initiate a curriculum of the unit-of-work type. The authors illustrate clearly,

concisely, and simply how they accomplished changes from a conventional to a newer type of curriculum. They offer an unusual wealth of suggestions on materials, procedures, activities, and bibliographies for the three units described in detail. Wisely the authors advise in the Preface: "The units . . . . are not given as models to be followed slavishly. They are merely examples of what can be accomplished when children and teacher together find some common interest that has sufficient breadth and depth to hold their attention for a considerable time" (p. vii).

As a handbook on newer curricular practices, realized under more than average public-school handicaps, this book deserves a wide and sympathetic reading among public elementary school teachers and supervisors.

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SCHOOL-ATTENDANCE WORK ON A PROFESSIONAL BASIS.—The truant officer as a bogeyman or a police officer of the worst type has long been the butt of criticism and ridicule. Professionally this school personnel officer has been considered as an unskilled, untrained worker interested in law enforcement only. No other phase of education has been so generally intrusted to untrained personnel. There has been too little thought of employing persons who could, because of training and experience, render a type of social service in connection with the school attendance of children.

Recently a comprehensive study[1] has been made of newer trends in attendance work in each of sixteen city school systems throughout the United States. These cities exemplify the newer conception—the point of view of the educator and the social worker. The study treats of the organization and the administration of the service, the type of staff engaged in the work, the supervision of the work, the contacts and the techniques of the workers, and the relations of the attendance department to other divisions of the school system. It makes an effort to identify the constructive elements which characterize the newer concept of attendance work. It shows that attendance work is a type of social service. Investigation, diagnosis, treatment, and follow-up are the steps in the techniques used in rendering this service. The attendance department should be the liaison group which integrates the school and community services in the interests of the child. It should endeavor to do something constructive *for* the child instead of doing something *to* the child.

The study is comprehensive of that which is, at the present time, the best in attendance work. From 132 attendance departments the author secured preliminary information dealing with the administrative organization of the service; the qualifications and the supervision of the personnel; the relations of the department to other school and community services; and the forms,

[1] Joseph LeMart Schultz, *An Analysis of Present Practices in City Attendance Work*. Philadelphia: University of Pennsylvania, 1938. Pp. xii+188. $1.50.

records, reports, and techniques employed in the work. From these sources he chose for intensive study sixteen cities representing the newer conception and the social-service trends in attendance procedures. Each of the sixteen cities illustrates one or more of the following phases of service: appropriateness to diagnostic and remedial attendance work of the administrative structure of the service, the co-operative relation of the attendance department with other pupil-personnel services, the supervision of the service, the scope of the service and its supervision, the selection of the personnel, and the techniques used.

The study deals not only with the theoretical phases of school attendance, as shown by the forms used, the annual reports, and the questionnaire data of these sixteen cities, but also with the actual practices of these departments of attendance. In each city several days were spent in a complete survey of the service. Using a questionnaire as a guide, the author interviewed attendance-department directors, supervisors, and workers. The information thus obtained was supplemented by the opinions of workers in other special services. City superintendents and assistant superintendents aided the author in evaluating the services rendered by the several attendance departments which were being studied critically.

This study and the literature which the author reviewed reveal that there is a definite trend from a policy of legal enforcement to that of social service, that the personnel officer in the attendance department must be thoroughly trained for the work, and that those departments which are accepting the newer concepts in attendance service are meriting professional rating by school administrators and by the community agencies dealing with social welfare.

The study is clearly written. It summarizes trends in attendance work which are not generally known to educators or to lay persons who seek to co-operate in the general community interests of children. It should be stimulating reading and a valuable guide to school administrators who are desirous of improving the services of this department in their school systems.

The contents of the eleven chapters, the thirty-one tables of data, and the appendix material constitute a source book of techniques, reference, and information which is a valuable addition to the current literature on school-attendance work.

E. R. CARSON

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EXPERIENCE AS EDUCATION.—Since life is made up mostly of living and since education is designed to help persons to improved living, we may expect that in time, as education gets its bearings, it will devote its energies mostly to preparing persons for proficiency in their activities. Since the first family trained its children for their life-activities, this emphasis has been nothing new to the world. Aristotle in his *Politics* expressed the activity concept as clearly as it can be found in the literature of today. Because the schools, with their

bookish substitute for living, have so long been in custody of education, the profession had, until recently, mostly forgotten that life is the way to learn to live. During the past few years, however, the profession has again been discovering activity as end and process of education. It is high time.

A recent book,[1] by a writer who has been long and favorably known, presents in simple and clear fashion the theory of the current form of activity movement as it exhibits itself today in the more progressive elementary schools. The chapter on the curriculum enumerates the wide and varied range of seventy-six types of activity that are practicable for the school program. The other eight chapters are largely devoted to explaining the justifications of these activities and the ways in which they are to be managed in order that they may be most effective in accomplishing desirable results.

The curriculum is to be self-directed living by the pupils under the wholesome and stimulating conditions provided by the school. Under the leadership and guidance of the teachers, the children are to live together as a social group and to share in the great variety of developmental experiences appropriate to their degree of maturity. The volume discusses all the basic factors that enter into this type of education.

Writers quoted with wholehearted approval are such as Dewey, Kilpatrick, Mary P. Follett, Francis W. Parker, Pestalozzi, Froebel, Comenius, Locke, and Rousseau.

Although the book presents the doctrine of the ultra-progressives, its words in almost all cases have their regular dictionary meanings, so that the book can be read with understanding by those outside the circle of the initiate. No book has come to the reviewer's hands which states the progressive doctrine more straightforwardly and clearly. It is, however, a sketch, not a treatise. Its aim is to portray the fundamentals in a brief and concise presentation.

FRANKLIN BOBBITT

University of Chicago

SAFETY READERS.—The Road to Safety Readers[2] have been produced to meet the growing demand for instruction in safety. The types of safety dealt with center in eight problems: school safety, first aid, safety out-of-doors, fire prevention, street safety, home safety, winter safety, and vacation safety. More definitely the problems considered have to do with experiences of children

[1] Lois Coffey Mossman, *The Activity Concept: An Interpretation.* New York: Macmillan Co., 1938. Pp. xviii+198. $1.50.

[2] Horace Mann Buckley, Margaret L. White, Alice B. Adams, and Leslie R. Silvernale, The Road to Safety: Book A, *Away We Go*, pp. 56, $0.15; Book B, *Happy Times*, pp. 138, $0.42; Book C, *In Storm and Sunshine*, pp. 152, $0.48; Book D, *In Town and Country*, pp. 216, $0.54; Book E, *Here and There*, pp. 286, $0.54; Book F, *Around the Year*, pp. 346, $0.57; Book G, *On Land and Water*, pp. vi+358, $0.60; Book H, *Who Travels There*, pp. viii+440, $0.66. Chicago: American Book Co., 1938.

on stairways, on sidewalks, on doorsteps, and on streets, as well as many other situations of a similar kind in which problems of safety occur.

Certain types of safety—fire and traffic, for example—are considered sufficiently important to be included in most, if not all, of the books. Safety problems arising from fire are viewed from many standpoints, beginning in the simplest book with a mere suggestion of danger by means of a picture of an open fireplace and ending in one of the more advanced books with a discussion of the reasons why firemen break windows or chop holes in the roofs of burning buildings. Other types of safety, as that which has to do with lightning, are treated in only one book. The wide range of topics dealt with and the extensive treatment of certain of these topics are evidently intended to impress the child with the importance of safety in our modern complex civilization.

As these books have little to indicate the school grade for which any single reader is intended, children in the upper grades will read the easier textbooks without feeling a let-down in intellectual dignity. Since a full understanding of the passages is highly desirable in dealing with safety, the vocabulary of the books, according to the accompanying statements of the publishers, is less difficult than might be expected in a basic series.

Much of the material is of the narrative and adventure type. Certain of the selections, such as "The Seeing Eye," will be interesting to many children. A large number of illustrations are used, many of which are in color; not a few are evidently the product of excellent artists. In many cases the pictures seem to make a contribution in emphasizing the need for safety.

What possibilities have such readers in a safety program? Safety is probably partly scientific and partly psychological. It seems to involve attitudes, feelings, and character traits. According to present-day theories, an excellent method for teaching most, if not all, phases of safety is through activity programs. Such activities will often be best when they are related to the child's reading. From this standpoint the present readers should be especially helpful in those schools without adequate library facilities, and in other schools they should be of distinct aid in that they make vivid many of the problems of safety and in that they make conveniently available a body of material on many problems of safety. One criticism of the readers which I have encountered, in discussing these books with well-trained, experienced teachers, relates to the moral teachings that are drawn from certain selections.

By way of estimate, I would suggest that most elementary-school teachers charged with teaching safety will want to examine the series carefully with a view to using one or more of these readers.

C. T. Gray

University of Texas

MATERIALS FOR USE IN SOCIAL STUDIES.—Some vital and interesting social-studies materials have become available for use in the intermediate grades.[1] The authors are H. B. Bruner, who is a widely known authority in the curriculum field, and Mabel C. Smith, who has had a broad background of experience in teaching and research.

The books are organized on a distinctly functional basis rather than on the plan of the conventional history or geography textbook. Following the now popular unit plan of organization, the books present an intensive study of a few important topics rather than a brief encyclopedic treatment of many subjects. The schedule of units is as follows: Book I, "The Story of Agriculture," "The Story of Fire," "The Story of the Sea," and "The Story of Writing"; Book II, "The Growth of the City," "Feeding the Millions," and "The Story of Clothing"; Book III, "The Story of Tools and Machines," "Transportation and Communication," "Conserving Our Natural Resources," and "What Is Money?"

Bruner firmly believes that young boys and girls should be interested in current problems and that they can discuss intelligently the real, live, social issues of the day. His belief is substantiated by material which he has collected through actual contacts with boys and girls in many cities where he has served as curriculum consultant.

The authors have done an exhaustive piece of research in collecting materials about each of the topics treated, and their admirable presentation of the topics furnishes ample proof of their scholarship and writing ability.

Are history and geography entirely ignored in this series of social-studies books? Absolutely not! The influence of our social heritage is a dominant theme which pervades all the units. In each unit the historical background of man's activities today is carefully developed. The origins of fire, agriculture, transportation, and communication, for example, are traced as far back as man's records go and, through the clever imagination of the authors, even into prehistoric times. Pupils will certainly gain an understanding of the slow but definite progress of civilization and develop an appreciation of the contributions which the people in times past have made to modern life.

With respect to geography, the influence of the physical environment on the life of man is another basic theme which has been prominently discussed in each of the units. Through pictures and verbal illustrations the life of people in typical regions is introduced incidentally in connection with the development of the various units. For example, life in Egypt is clearly described in connection with the unit on agriculture, life in ancient Greece in connection with the unit on the growth of cities. In like manner, pupils will obtain, in connection

[1] Herbert B. Bruner and Mabel C. Smith, *Social Studies:* Intermediate Grades, Book II, pp. viii+472, $1.20; Book III, pp. viii+568, $1.40. New York: Charles E. Merrill Co., 1938.

with the different units, a rather comprehensive picture of life in the United States and in typical regions of the world.

How can these books be most effectively used? In schools in which an integrated or correlated social-studies program has been organized on a functional basis, these books could well be provided as basic material. In schools where a more traditional program in social studies is followed, ten to fifteen copies of these books in a classroom would provide excellent supplementary material for use in connection with a textbook in history or geography.

Certainly the availability of materials of this type will further the trend toward a better unified and a more functional social-studies program.

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

BRUCE, WILLIAM. *Principles of Democratic Education: A Functional Approach to Fundamental Problems of Teaching.* New York: Prentice-Hall, Inc., 1939. Pp. xiv+382. $2.50.

BUTLER, FRANK A. *The Improvement of Teaching in Secondary Schools.* Chicago: University of Chicago Press, 1939. Pp. x+390. $3.00.

COLE, LUELLA. *Teaching in the Elementary School.* New York: Farrar & Rinehart, Inc., 1939. Pp. xvi+518. $2.50.

CULBERT, JANE F., and SMITH, HELEN R. *Counseling Young Workers.* New York: Vocational Service for Juniors (95 Madison Avenue), 1939. Pp. xii+212.

CURTIS, FRANCIS D. *Third Digest of Investigations in the Teaching of Science.* Philadelphia: P. Blakiston's Son & Co., Inc., 1939. Pp. xviii+420. $3.50.

GRIFFITH, COLEMAN R. *Psychology Applied to Teaching and Learning: A First Book in the Field of Educational Psychology.* New York: Farrar & Rinehart, Inc., 1939. Pp. xii+650. $2.60.

MAXWELL, C. R., and REUSSER, W. C. *Observation and Directed Teaching in Secondary Schools.* New York: Prentice-Hall, Inc., 1939. Pp. xiv+434. $2.00.

SPAULDING, FRANCIS T. *High School and Life.* The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xviii+378. $3.00.

WILSON, HOWARD E. *Education for Citizenship.* The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xii+272. $2.75.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

BEAUCHAMP, WILBUR L., MAYFIELD, JOHN C., and WEST, JOE YOUNG. *Science Problems for the Junior High School*, Book II. Chicago: Scott, Foresman & Co., 1939. Pp. xii+578. $1.48.

BLOUGH, G. L., and MCCLURE, C. H. *Fundamentals of Citizenship*. Chicago: Laidlaw Bros., 1939. Pp. 446. $1.20.

CANNON, FANNY VENABLE. *Rehearsal for Safety: A Book of Safety Plays*. New York: E. P. Dutton & Co., Inc., 1939. Pp. 132. $1.00.

Congress at Work: A Graphic Story of How Our Laws Are Made and of the Men Who Make Them. Pittsburgh, Pennsylvania: Scholastic Corp. (Chamber of Commerce Building), 1939. Pp. 32. $0.25.

GLOVER, KATHERINE. *America Begins Again: The Conquest of Waste in Our Natural Resources*. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xvi +382. $1.76.

HALL, KATHARINE HEDGES. *A Book of Fun*. Boston: Ginn & Co., 1939. Pp. 160. $0.80.

LYNDE, CARLETON JOHN. *Science Experiences with Inexpensive Equipment*. Scranton, Pennsylvania: International Textbook Co., 1939. Pp. xiv+258. $1.60.

Official Sports Library for Women: *Official Aquatic Guide*, edited by Frances A. Greenwood, pp. 72; *Official Basketball Guide for Women and Girls Containing the Revised Rules, 1938–1939*, edited by Wilhelmine Meissner, pp. 80; *Official Individual Sports Guide—Archery, Tennis, Riding, and Golf*, edited by Margaret Fitch Newport, pp. 96; *Official Recreational Games and Sports Guide—Badminton, Track and Field*, edited by Bertie Hammond and Alice C. Schriver, pp. 100. New York: Published for the National Section on Women's Athletics of the American Association for Health, Physical Education and Recreation by A. S. Barnes & Co., 1938. $0.25 each.

On a Rainy Day. Prepared for the National Recreation Association by Dorothy Canfield Fisher and Sarah Fisher Scott. New York: A. S. Barnes & Co., 1938. $1.00.

Tales from Far and Near. Radio Bulletin. Association for Arts in Childhood, Bulletin No. 4. New York: Association for Arts in Childhood (70 Fifth Avenue), 1939. Pp. 32. $0.10.

THOMPSON, BLANCHE JENNINGS. *More Silver Pennies*. New York: Macmillan Co., 1938. Pp. xiv+156.

Watch Your P. Q. (Personality Quotient): An Anthology of Helpful Information, Biographical Sketches, and Tests for Modern Young People on Ways of Improving Their Personalities. Pittsburgh, Pennsylvania: Scholastic Corp. (Chamber of Commerce Building), 1939. Pp. 32. $0.25.

WELDAY, ROY A. *Your Automobile and You*. New York: Henry Holt & Co., 1938. Pp. xiv+252. $0.88.

YOUNG, JEREMIAH S., and BARTON, EDWIN M. *Growing in Citizenship.* New York: McGraw-Hill Book Co., Inc., 1939. Pp. xx+822+lii. $1.76.

PUBLICATIONS IN PAMPHLET FORM

CHAMBERS, M. M., and BELL, HOWARD M. *How To Make a Community Youth Survey.* American Council on Education Studies, Vol. III, No. 2. Series IV, American Youth Commission. Washington: American Council on Education, 1938. Pp. 46. $0.25.

Curriculum Materials in the Social Studies for the Intermediate Grades. Maryland School Bulletin, Vol. XX, No. 1. Baltimore: State Department of Education, 1938. Pp. 208. $0.60.

Deliberative Committee Reports, 1938. Washington: Educational Policies Commission of the National Education Association of the United States and the American Association of School Administrators, 1939. Pp. 64. $0.50.

Our Taxes—and What They Buy. Public Affairs Pamphlets, No. 28. New York: Public Affairs Committee, Inc., 1939. Pp. 32. $0.10.

Pennsylvania Program of Extension Education. Bulletin 292. Harrisburg, Pennsylvania: State Department of Public Instruction, 1938. Pp. 84.

Pennsylvania Program of Literacy and Citizenship Education. Bulletin 293. Harrisburg, Pennsylvania: State Department of Public Instruction, 1938. Pp. 84.

Proceedings of the Fifteenth Annual Educational Conference and the Fourth Annual Meeting of the Kentucky Association of Colleges and Secondary Schools. Bulletin of the Bureau of School Service, Vol. XI, No. 2. Lexington, Kentucky: University of Kentucky, 1938. Pp. 214.

Proceedings of the Twenty-fifth Annual Meeting of the Association of Urban Universities at Cincinnati, Ohio, 1938. Sixteenth Report. Cincinnati, Ohio: University of Cincinnati, 1938. Pp. 86.

Thirty-third Annual Report of the Carnegie Foundation for the Advancement of Teaching. New York: Carnegie Foundation for the Advancement of Teaching (522 Fifth Avenue), 1938. Pp. 240.

TRAXLER, ARTHUR E. "The Nature and Use of Anecdotal Records." Educational Records Supplementary Bulletin D. New York: Educational Records Bureau (437 West Fifty-ninth Street), 1939. Pp. 32 (mimeographed).

Who Can Afford Health? Public Affairs Pamphlets, No. 27. New York: Public Affairs Committee, Inc., 1939. Pp. 32. $0.10.

UNITED STATES OFFICE OF EDUCATION PUBLICATIONS:

Circular No. 177, 1939—"School Tours." Pp. 14 (mimeographed).

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Educational News and Editorial Comment

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Senator Harrison on Federal Aid to Education

As the readers of the *Elementary School Journal* are aware, Senator Pat Harrison of Mississippi introduced in the Seventy-fifth Congress a bill providing for federal aid to education in the states. Since that time the President's Advisory Committee on Education has made its report, and a new bill is now before the Congress. In view of these facts, interest attaches to the following statement of Senator Harrison, which appeared in a recent issue of *State Government.*

As far as I have been able to determine no advocate of federal assistance to the states for education stands for any policy or legislative provision that would result in the federal control of our schools. Both the proponents and opponents of this type of federal aid are agreed that under our form of democratic and representative government the national welfare will be best promoted and safeguarded by keeping the control of our public schools where it has always been, in the hands of the states and thousands of local communities and their school boards. I have never conversed with nor heard of a member of the United States Congress, since I have been a member of it, who said that he would support a bill that contains provisions for federal control of education.

Under our system of federal-state relationships it is an accepted and practiced principle that the national government can and should co-operate with the states in promoting interests of highest importance of both state and nation.

Such co-operation has been carried on, and is now being carried on successfully. Those who maintain that a policy of co-operation between the federal and state governments in the financial support of public schools must result in undesirable federal control of the schools can do so only by imputing motives that do not exist to those who favor such a policy of co-operation, and by refusing to give proper consideration to past experiences and to constitutional and statutory provisions prohibiting federal control.

It certainly will be conceded that our federal government can exercise only such powers as are delegated to it by the United States Constitution or clearly implied therein; that the Constitution does not give to the federal government or to the Congress the control or management of public education within the states; and that the Tenth Amendment to the Constitution expressly provides that "the powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people." Certainly any legislation likely to be enacted by the Congress would embody the clearest possible declaration of the authority of the states to manage and control their public-school systems.

Starting with a false hypothesis, basing their arguments on false assumptions, and ignoring the facts of federal and state co-operation in many fields, those who have opposed federal grants to the states for education would lead the people to believe that many of the nation's leading statesmen and thousands of the nation's best recognized educators who favor federal participation in the support of education would either wilfully or ignorantly bring about conditions disastrous to our free institutions. . . . .

It is no longer a debatable question as to whether all the states can adequately support their public schools with equitable effort if they put their fiscal houses in order. The facts are now too well known to be left as a mere matter of forensic eloquence and personal opinion. As measured by per capita wealth, per capita income, per capita retail sales, or any one of a dozen or more other measures of the financial ability, and as measured by the application of each of the states of the Model Tax Plan proposed by the National Tax Association, there are insuperable differences in the ability of the different states to raise public revenues. There are some states which, if they levied all the taxes at the rates recommended by the tax experts, would not be able to raise sufficient revenue from all sources to support a school system equal to the average of the nation—even if all their revenue were spent for schools and nothing whatever spent for any other kind of state or local governmental services. Every known fact shows that the states most able to support schools can raise from six to eight times as much per pupil as the least able states. . . . .

In the early part of the Seventy-fifth Congress I introduced a bill to provide federal appropriations to the states to assist them in the support of public schools. That bill was reported favorably to the Senate by unanimous vote of the Committee on Education and Labor. The President then appointed the Advisory Committee on Education to study the relation of the federal govern-

ment to state and local conduct of education and further action was deferred until the President's committee could report.

On February 23, 1938, the President's committee made its report, confirming on the basis of careful research, practically every conclusion reached by the Senate Committee on Education and Labor. Immediately after, Senator Elbert D. Thomas, chairman of the Committee on Education and Labor, introduced a substitute for the Harrison-Black Bill, a bill to carry out substantially the recommendations of the President's Committee. Many helpful suggestions for improving that bill have been received from leading authorities throughout the country. On the basis of these suggestions the bill will be redrafted and introduced by Senator Thomas and me in the early part of the Seventy-sixth Congress, and every effort will be made to secure its enactment.

In an address on June 30, 1938, the President said: "But we know that in many places local government unfortunately cannot adequately finance the facilities to learn. And there the federal government can properly supplement local resources." That statement is in keeping with the conclusion of his committee: "Unless the federal government participates in the financial support of the schools and related services in the less able areas, several millions of the children in the United States will continue to be largely denied the educational opportunities that should be regarded as their birthright." We should, therefore, be able to look confidently forward to the early enactment of this desirable and necessary legislation.

The New Educational Program in Italy

The following statement is quoted from a recent issue of the London *Times Educational Supplement.*

At its sitting on Wednesday night [February 15, 1939] the Fascist Grand Council approved a scheme to be known as the "School Charter" for the reform of education in Fascist Italy. The charter is intended to give a particularly Fascist stamp to the education of Italians from infancy to maturity.

There is to be close collaboration between the school and the Fascist Party, since the school, the G.I.L. (Fascist Organization for the Training of Youth), and the G.U.F. (Fascist University groups) are together to form the complete instrument of Italian education. Attendance at the instruction given in these three educational organizations is made compulsory (between the ages of four and fourteen at school and the G.I.L.; at the G.I.L. up to twenty-one even for those who do not continue at school; at the G.U.F. for all university students). All Italians will thus receive progressively a moral, cultural, military, and political training.

A new educational feature is introduced in section five, which lays down that labor in all its forms—intellectual, technical, and manual—is considered as a social duty, and part of the instruction in all schools from the elementary upwards will take the form of periods of labor, in workshops, factories, on the

land, or at sea. The Italian school is to be divided into four branches—elementary, secondary, higher, and university, each with its own subdivisions of specialized training or faculties.

The new School Charter is to be applied in the scholastic years 1939–41, and is represented as "the expression of a Totalitarian State which intends to move towards the masses and shorten the distances between the social classes." To this end, the privileges of wealth in the educational sphere are abolished, and henceforth, it is emphasized, the higher educational establishments will no longer be a privilege of the well-to-do classes, as they will be open also to the poor who show talent.

Bertrand Russell on Education for Democracy

The following paragraphs are quoted from a recent address of Lord Russell, the distinguished English philosopher and mathematician. The address was delivered before the Department of Secondary-School Principals at its Cleveland meeting.

If democracy is to be workable, the population must be, as far as possible, free from the fiercer emotions of hatred and destructiveness and also from the emotions of fear and subservience. Now, those are emotions which are inculcated in very early childhood. A parent of average ferocity begins with his or her child by the attempt to teach him complete obedience, and makes him either a slave or a rebel, and neither a slave nor a rebel is what is wanted in a democracy. A citizen is a different sort of person from either a slave or a rebel, but you cannot get the proper emotions for a citizen out of an autocratic and rather cruel type of parent, nor, of course, out of an autocratic and cruel type of school. . . . .

I should like to see people exposed in schools to the most vehement and terrific argumentation on all sides of every question. I should like to see this organization, the Department of Secondary-School Principals, get the most eloquent advocates of every imaginable point of view to broadcast to all the schools in the country, opposing each other, putting their rival points of view. I should like the teachers then afterward to say to the children, "Well, now, you have heard what so-and-so said. I think the time has come when you should analyze his arguments, put them down on paper, and see what they come to." The children would very soon find out that the orators who had the most effect at the moment were those who had the fewest arguments when you put them on paper. If you had opposite points of view put on every kind of thing, the opposite propagandists would neutralize each other, and in the end you would get people who might be capable of listening to eloquence without being carried away by it. That is one of the most important things—to learn to be immune to eloquence. You will not be that by never hearing eloquence; you have to hear a lot. I should have all the schools listening to all the sorts of eloquence, only I should take care that it was of opposite sorts. . . . .

As I said, the advertisers led the way; they discovered the technique of producing irrational belief. What the person who cares about democracy has got to do, I think, is deliberately to construct an education designed to counteract the natural credulity and the natural incredulity of the uneducated man; because the uneducated man has these two opposite defects; he believes a statement when no reasons are given for it, and equally he disbelieves it when reasons are given. So that you have two opposite tasks; to cause people not to believe when there is no reason, and also to cause them to believe when there is reason. The credulity and the incredulity are exactly wrong in the natural man. I think if there is any [argument] for original sin, it is perhaps in this direction, in the ways in which we come to believe and to disbelieve things.

I should start very young. If I had to run an infant school, I should have two sorts of sweets, if I were the teacher—one very, very nice and the other very, very nasty. The very nasty ones should be advertised with all the skill of the most able advertisers in the world. On the other hand, the nice ones should have a coldly scientific statement, setting forth their ingredients and consequent excellence. I should let the children choose which they would have. I should, of course, vary the assortment from day to day, but after a week or two they would probably choose the ones with the coldly scientific statement. That would be one up. I should go on in the same way all through. . . . .

I should do the same in teaching history. I should take them through great controversies of the past. I should let them read the most eloquent statements in favor of positions that nobody now holds. For example, before the American Civil War, the southern orators—who were magnificent orators—made the most moving speeches in defense of slavery. If you read those speeches now, you almost begin to think it must have been a good thing. I should read them all kinds of very, very eloquent defenses of views that nobody now holds at all, such as the importance of burning witches.

When they had grown a little impervious in that way, I should give them rhetoric in the present, similar speeches in favor of current controversial opinions. I should give it to them always on opposite sides. I should read to them every day, as a sort of *bonne bouche* to their history, what is said about Spain, first by the *New York Times* and then by the *Daily Worker* so long as the Spanish question lasts, or whatever question is on. I should say, "What do you suppose has happened?" In time, perhaps, they would learn to infer the truth from these opposite statements.

The art of finding out from the newspapers what it was that happened, is a very difficult one indeed, and one that every democrat should be taught. It is very instructive to read newspaper accounts when you have been an eyewitness of an occurrence. I should try as much as possible to get pupils to have the experience of seeing first of all what did happen, and then what was said to happen by the opposite sides, and so to learn that the truth is usually about in the middle.

There is a great deal to be done in this direction if people are to be capable of

understanding how to judge a political question. I do not want to teach people one opinion or another opinion; it is not the business of education to do that. The business of education is to teach pupils to form opinions for themselves, and they need for that purpose to be rather impervious to eloquence and propaganda, to be on the lookout for the things that are intended to mislead, and to be able to pick out what really is an argument and base themselves on that.....

I want to safeguard myself at this point. You cannot get any kind of improvement in the world, or any kind of good life, without a basis in the emotions. But you have to be sure that that basis is the right one. I think that the only sort of emotional basis is what I should call kindly feeling, that is to say, a wish, not only in regard to your friends and the people you know, but in regard to mankind at large, that as far as possible they should be happy, enlightened, able to live a decent sort of life. When you find other ideals, as you very often do, strongly recommended in terms that sound like lofty morality, such ideals as national greatness, the victory of this or that cause, or any kind of thing that involves the suffering, the destruction, the misery of some large group of mankind, then say, "That is not an ideal that I care for or that any democrat can care for, because it is of the essence of democracy that we think every human being counts alike."

I have said very little about the nonintellectual aspects of the matter, but I should like to end with a few words about that, because, while I have said that what I want is as far as possible something like the scientific attitude, I do want also besides that some capacity to feel what are the ends of life and what makes life important to human beings.

That is a matter for the cultural side of education. I do not think that is to be obtained merely by knowing facts. It is to be obtained in different ways by different people. Many get it from music or poetry. Some people get a great deal from astronomy. I sometimes think that, if people would reflect upon the size and antiquity of the stellar universe, they would perhaps feel that some of the controversies upon this rather insignificant planet are not so important as they seem to some of us, and perhaps that might take a little of the acerbity out of our disputes. We need negatively the realization that our disputes are not so important as they seem, and positively, through art, through music, through poetry, and so on, the feeling that there are things really valuable that human beings can enjoy and achieve, and that these are different things from the ones that come in the clash of politics, not the sort of things that happen on a battlefield, but individual things, things that happen in your own mind, important feelings, emotions, and insights. All these things are to be kept alive, things not to be sacrificed to the collective, organized life of the community. That life is necessary, it has to go on, but it is not the highest part of our life. The highest part of our life is more analogous to what the religious teachers have always spoken of. It is something more individual. I think perhaps that is the deepest quarrel I have with the people who believe in the corporate state and all the rest of it, that they seem to think that our highest life is in collective activities, and I

do not believe that at all. I think our highest life is something more personal, and that where we co-operate in large groups, although co-operation is immensely important and necessary, it is not as a rule with the very highest part of our nature, because we all of us reach our best in somewhat different things, so that where we all work together it is hardly possible that we can each of us reach quite the best that our nature is capable of.

I think all education ought to bear that in mind and ought to be very conscious of the possibility of individual excellence in the future. For that reason much the most important of all qualifications in a teacher is the feeling of spontaneous affection towards those whom he teaches, the feeling with each one of them, "This is a person with certain capacities, a person who can do certain things, who has a right to his place in the world," and not, "This is a soldier in the army," or "This is material for propaganda," or "This is one of the persons out of whom I can make a great power which can do this, that, or the other." That is not the way to use the material which you teach. The right way is one much more analogous to the religious way, which realizes that each human being has in himself certain excellencies and certain possibilities, and that the business of education is to bring those out.

Here and There among the Schools

Items selected for reporting in this issue of the *Elementary School Journal* relate to community co-operation in the use of sound films, a plan for the administration of a county unit, an educational program designed to serve all members of a community, a new health record card, an auditorium social arts program, and the development of a child-health fund.

Community co-operation in the use of sound films A comprehensive, instructional sound-film program is being introduced into the schools of Kilgore, Texas, and into the schools of a number of co-operating communities. The program, as described in a recent number of the *Instructional Sound Films Bulletin*, was initiated by W. L. Dodson, superintendent of schools and president of the junior college at Kilgore. As a result of a series of conferences of school administrators in this territory, twenty-two schools agreed to subscribe to a co-operative sound-film service to be centered in Kilgore. The general responsibility for the development of the work will be assumed by Mary Clint Irion, who will leave her position as assistant director of visual aids in Los Angeles County schools to take charge of the program.

The co-ordination of work in a county school system Some years ago the state of West Virginia adopted the county unit of school administration. In order to give unity and direction to the work of the schools of his county, Bryan Hamilton, superintendent of schools of Randolph County, with the aid of Emily J. Wilmoth, assistant superintendent, and Henry Hamilton, director of high schools, has prepared a mimeographed bulletin entitled "A Plan for Administration of the County Unit in Randolph County." The bulletin is intended as a practical handbook and guide to the school supervisors and teachers of the county. It discusses at some length the general plan of operating the schools and contains sections on the underlying philosophy of the county school system, supervision, notes to teachers, the daily program, supplementary materials, standards and syllabi, health education, bus transportation, and textbooks. It is a type of handbook which might well be of interest to county school officials in other states. Presumably it can be secured from Superintendent Hamilton at Elkins, West Virginia.

An educational program for the whole community Under the general direction of Glenn Kendall, superintendent of schools, an educational program is being worked out in Norris, Tennessee, which is designed to challenge the interests and serve the needs of all members of the community. The following statement descriptive of the program, prepared by Mr. Kendall, was published in a recent issue of the *Curriculum Journal.*

Education, as accepted by the Norris educational staff and the citizens of the town, is a continuous process, extending to and serving all age groups. To that end, there is maintained an educational program, beginning with the nursery-school children at approximately two years of age, continuing through the kindergarten, the elementary school, the secondary school, and embracing a general adult-education service. Among these adult services are: a full-time library, a motion-picture program, general shop services, arts and crafts, health education, general cultural classes, recreational facilities, and in-service training, as accounting, typing, dictation, etc., for employees of the Tennessee Valley Authority.

The program is planned primarily to serve the citizens of the town of Norris and approximately 125 pupils from a rural area near the town. The pupils from outside the town limits come by tuition arrangement with the County Board of

Education. Services have been and are being extended into a larger area by co-operative arrangements and agreements with various agencies. An example of this type of service is one now in effect in health education. The County Board of Education, the County Health Department, the State Department of Health, and the educational program at Norris are co-operating in a joint enterprise in health education for an area of approximately one hundred square miles around Norris.

The educational philosophy which governs the program has been stated by the staff in the following tentative terms: "The aim of education in Norris is to develop healthy, intelligent citizens and happy, socially useful members of a democratic society. We believe this can be done best by having the participants share as much as possible in the planning, execution, and evaluation of their total educational program. This assumes that they will take an increasing responsibility for their work and individual development in all their educational activities and through life."

The following concrete statements have been accepted as guides in the development of the program:

1. The curriculum should be centered around basic areas of human activity. These basic areas should be outgrowths of the needs and interests of the participants. Insofar as possible, the participants should sense and express these needs and interests.

2. There should be core fields of instruction adjusted to the needs and interests of individuals rather than a definite number of separate subjects.

3. Integration, rather than specialization, in the main should be followed.

4. Commonly designated extra-curriculum activities should become a part of the regular curriculum.

5. Subject matter should be used as it applies to real life situations; not as having virtue in itself.

6. Functional values, such as appreciations, ideals, self-direction, etc., are perhaps the most important values which can be developed, and concerted effort should be made to insure their growth.

7. The curriculum should be society-centered rather than subject-centered.

8. The school should be organized throughout for laboratory procedures, using the community as much as possible for firsthand studies and experience.

9. The guidance program should be an integral part of the curriculum and of each instructor's program.

10. An intensive effort should be made to select and to develop a wide variety of printed, visual, and other objective materials for classroom use. Textbooks should be used with due regard to their limitations.

11. Evaluation of work done should be practiced by the student as well as by the teacher.

12. Marks, honor rolls, contests, and other forms of rivalry and competition should be eliminated as far as possible.

A new type of health record card in New York The school authorities of New York City are putting into operation a new system of child accounting. A new record card for scholastic achievement was recently introduced. The announcement is now made that a new type of health record card, intended to follow the child from the kindergarten until he finishes high school, will be put into use shortly.

Auditorium social arts in a junior high school A mimeographed bulletin, prepared by Edward R. Lorenz and W. H. Bateson and entitled *Auditorium Social Arts in Jefferson Junior High School, Dubuque, Iowa,* describes at some length the extensive program which the authors have worked out in their school. The objectives of the program, the methods employed, the physical setup, and the materials used are all treated in detail. The first major objective is orientation, the purpose being to familiarize the pupils with the rules and the spirit of the school, parliamentary procedure, the use of the library, the club program, and the like. The second general objective is citizenship training. In this part of the program opportunities are afforded for practice in self-government through pupils' associations, leadership, co-operation, initiative, and a sense of responsibility. The third general objective is the correlation and the motivation of classroom subjects through the use of certain supplementary materials, such as debates, round-table discussions, illustrated lectures, visual aids of all kinds, and dramatizations. The two other major objectives are guidance and the proper observance of special days commemorative of the lives of great men. Principals and teachers interested in programs of this kind will find the bulletin helpful and suggestive.

Health service for children in Fort Madison, Iowa From A. I. Tiss, superintendent of schools at Fort Madison, Iowa, we have received the following account of a plan to provide a more adequate health service for the children of the community.

The Fort Madison Public Schools, under the leadership of Zoe Mertens, school nurse, and the grade principals, have developed a comprehensive plan for taking care of indigent pupils in the local schools.

Six years ago when the depression began to interfere with the proper care of children, the teachers formed an organization to raise money for food and medical care. At first they gave 2 per cent of their salaries, but that donation is no longer necessary.

This year over four thousand dollars will be spent on health work in the schools. Heretofore immunization against diphtheria was given when the children entered school. Now each September two hundred children over nine months of age are given toxoid at a cost of one dollar each. As a result diphtheria as a scourge to childhood has been eliminated from Fort Madison. Eight hundred dollars will be spent on tonsillectomies and medical attention this year; fifteen hundred dollars on milk, lunches, and clothing; and eight hundred dollars for dental work. All children have been tested twice for hearing defects by Dr. Gardner of the University of Iowa, and as a result a lip-reading teacher has been hired.

For this work the local Red Cross organization gives annually four hundred dollars; the Rotary Club, two hundred dollars; the Board of Education, five hundred dollars; the King's Daughters and the parent-teachers' associations, two hundred dollars each. A card party and a carnival usually net a thousand dollars. Donations this year from citizens, the American Legion, the City Council and Board of Supervisors, and the grade and parochial schools will total another thousand. Each year someone who calls himself "the unhonored and unsung taxpayer" makes an anonymous contribution because he believes it to be "the best work the schools are doing." This year he will give a thousand dollars and after that two thousand dollars a year. Only the superintendent of schools knows his name.

All pupils, when they enter the junior and senior high schools, and pupils participating in physical education and athletics must pass a thorough physical examination under a physician each year. The Fort Madison Medical Society agreed to do this for two dollars for each examination. If the parents of the child are financially able to pay for the examination, they have done so; if not, the expense has been checked out of the Child-Health Fund. Approximately four hundred school children have received this service since September. Weak hearts and lungs, failing eyesight, bad tonsils, etc., have been found. Several cases have already been taken care of, and several are now being treated.

The fact that so many organizations contribute to this fund indicates that it has enthusiastic support. With few exceptions, teachers and principals believe it to be the best work they do and support it with unstinted effort and with their own money.

New Evidence on the Value of Preschool Education

A publication of the University of Iowa, entitled *A Study of Environmental Stimulation*, reports the results of a very significant investigation. Children living in an orphanage were divided into two

carefully matched groups, a preschool group and a non-preschool, or control, group. The consequences flowing from preschool attendance are little short of startling. They reveal conclusively the disastrous effects of an unfavorable environment in the early years of the child's life. The study has such an important bearing on both educational and social policy that we feel justified in quoting the conclusions at some length.

The study described in the foregoing pages set out to determine the effects of preschool education (through the medium of a preschool) introduced into the lives of underprivileged children living in an orphanage. A unique opportunity to study the effects of such education by the control-group technique with control over other variables was offered by the orphanage situation. Here both experimental and control subjects were exposed to the same environmental influences except for the hours of the day when the experimental group attended preschool. They lived in the same "cottages," ate together in a common dining-hall, slept in the same dormitory, and were under the direct care and supervision of the same orphanage staff.

The study extended over a three-year period. At its beginning . . . . the children of preschool age living in the orphanage at the time were divided into two carefully matched groups. They were equated on intelligence, chronological age, sex, length of previous residence in the orphanage, nutritional status, and presence or absence of sensory defects. As time went on new admissions to the orphanage were assigned to their respective group with an attempt to keep the two groups continually equated. Meanwhile some children already in the project were placed in foster-homes or progressed in age beyond the limits of the preschool's jurisdiction. At any one time the enrolment in preschool was approximately twenty children, sometimes more, sometimes less. . . . .

Taken all in all, the preschool exerted a profound influence upon the children during the period of preschool enrolment and probably in a number of instances changed the whole tenor of their later lives. Some of the children were made placeable in foster-homes who almost certainly otherwise would have been doomed to commitment to an institution for the feeble-minded or at best would have continued to reside in the orphanage. To the reader who has not perused the chapters of research results these statements may seem unbelievably extreme. The statements, however, have arisen out of the results of the study and not from preconceived ideas at the outset. Not one of the authors anticipated the extreme effects produced by an unfavorable environment. Rather the bias was one, on the basis of past experience with children from superior homes, of expecting gains in the preschool group which would not be duplicated in the control group. . . . .

From the chapter on intelligence it will be seen that the contribution of the preschool to intellectual growth was largely that of counteracting losses toward

which the extra-preschool environment was constantly pulling. There was no especial difference in pattern of growth over a period of approximately four months. Subsequently the preschool and control groups began to diverge, and the divergence became accentuated as time went on. The effect of long residence for the control group was that of tending to bring all children, regardless of initial intelligence classification, to high-grade feeble-mindedness or borderline classification. The greatest decreases, therefore, arose for children originally of average intelligence who became feeble-minded. Several children from the control group were at the close of the project transferred to an institution for the feeble-minded. The trend for the preschool children was toward normality in intelligence. Those who were initially average remained average, and the lower levels were moving upward, resulting in a small mean gain for the total group.

Although not enough time has elapsed since the project ended to permit follow-up studies of the permanence of effects of preschool education, the results on the few children who could be so studied confirm the beneficial effects of preschool attendance upon later intellectual development and school progress. The preschool children who were placed in foster-homes made better subsequent intellectual growth than the control children who were placed. Those who remained in the orphanage excelled the control children in grade placement and scholarship. . . . .

Marked differences between preschool and control children were found in respect to social maturity (social competence). From a very early date in the project, the preschool children functioned at approximately a normal level, as judged by the standardization norms, while the control children functioned at a level about one year below the preschool group. This difference was in line with expectancy, since in the early part of the project there was concentration of teaching efforts upon routine habits. Following the initial separation, the general tendency was for some loss in social quotient in both groups as time went on. It seems probable that the loss by the preschool group may have been due to lessened emphasis on routines and greater concentration of effort elsewhere. Of significance is the finding that within each group the loss or gain of particular children showed a strong tendency to vary according to their position in the group. There was a general tendency to move towards the mean of the group. Yet this process took place from two entirely different absolute levels of the preschool and control groups.

Within the preschool group certain changes in social adjustment and social behavior were evident during the course of the project. Most of the changes seemed to indicate improved adjustment to the social situation and the school, increased emotional control, happier contacts with other individuals, more purposive activity, and a trend away from the extremes of social behavior.

Taken as a whole, the results of the study have a bearing on the concept of maturation, if this is thought of as primarily a physiological process little influenced by training. Such a concept does not appear tenable in the light of results obtained here. Not one of the areas studied supports such a concept.

Maturation appears rather to be an unfolding, adjusted in tempo and in nature to the demands or opportunities of the situation.

Similarly, in the light of the major shifts in ability and characteristics in almost every area studied, one is given pause on the problem of inheritance of abilities. The limits set by heredity within which changes can take place are assuredly wide. The present study did not begin to tap the limits, since optimum conditions for child development were far from being realized; probably minimum conditions were more closely approximated. The entire study serves rather to give only a hint of the range of responsiveness of the organism to its environment.

A Helpful Guide in the Administration of Pupil Transportation

In rural areas the transportation of pupils to and from school is an increasingly important aspect of school administration. The bus-driver, a newcomer among school employees, has important work to do, and much depends on the efficiency with which he does it. His first responsibility, of course, is the safety of the children committed to his care. This responsibility involves something more than the avoidance of accidents; it involves attention to the comfort and the health of pupils. In a very real sense the bus-driver is also a teacher. For at least part of the day pupils are under his control, and his influence may be demoralizing or it may contribute much to the development of good citizenship. Moreover, the bus-driver is in a position to know a great deal about what is going on in the school. He hears much, and he may or may not talk much. If he is a person of some importance in the community, as he usually is, he has it in his power to influence public opinion with respect to the school.

School administrators as well as bus-drivers should find particularly helpful a pamphlet recently published by Professor Ward G. Reeder, of Ohio State University. It bears the title *A Manual for the School Bus Driver*. Among the topics treated are the following: "Qualifications of the Driver," "Certification and Selection of the Driver," "Training of the Driver," "Operating Rules for the Driver," "Transportation Rules for Pupils," and "Liability for Accidents, and Transportation Insurance." The following paragraphs dealing with the bus-driver's liability for accidents are of such pertinence that they warrant quotation.

Although the decisions of the courts have frequently disagreed on the matter, most of them have not held school employees liable for accidents. When negligence of school employees has been proved, the courts have sometimes held against them—much more often than they have held against the board of education. The question of liability is, therefore, determined by the decisions of judges and juries.

Often the decisions of the courts have been determined by whether the persons being sued were school employees, or whether they were contractors. Concerning school bus drivers the courts have not clearly determined the conditions under which the employee relation exists and the conditions under which the contractual relation exists. As a rule, ownership of the school bus by the driver makes him a contractor and therefore liable for any accidents which may be due to his negligence. Transportation contracts frequently contain a clause which gives the board of education the right to terminate the contract whenever the services of the driver are considered unsatisfactory or "as the best interests of the school may require"; according to a California court decision, such a clause changes the relationship of the driver to the board of education, making him an employee and not a contractor (*Smith* v. *Fall River Joint Union High School District*, 118 Calif. App. 673, 5 Pac. [2d] 1930).

When the bus-driver can be shown to be a real contractor, the courts have usually decided that he is liable for damages in case of an injury for which he was partly or wholly responsible. They have held that an individual may not contract against his negligence, and that although the contractor may be an agent of a body immune to damages that fact does not make the agent immune. In Florida, for example, the Supreme Court held a driver liable for damages because he failed to repair a defective window guard, thus permitting a pupil to be injured; the decision of the court in this case is quoted herewith (*Burnett* v. *Allen*, 154 So. 515):

"As the contract contemplated the transportation of children who are incompetent to be charged with the assumptions of risks, because of their tender years and inexperience, it is likewise contemplated and, by implication at least, binds the person contracting to furnish the means of transportation to use every reasonable precaution and care for the safety of such children and to prevent any harm or damage coming to them, either when approaching the bus, while riding in the bus, or when alighting from and leaving the immediate proximity of the bus, at the completion of the journey, or during any part of the journey. Whether a person so contracting has used all such reasonable care and caution is a question for the jury in each case."

On the other hand, the bus-driver can feel safe from the award of damages when he has exercised due care in performing his duties. In support of this rule the case of Lewis against Halbert in the Texas Civil Appeals Court, December 15, 1935, is cited. In that case the driver had contracted to "use every care and precaution in the way of protecting the children being transported." However, while being transported a pupil fell from, and was run over and killed by, the

bus; thereupon his parents brought suit against the driver, claiming that his negligence led to the fatal injury. The court denied any damages on the ground that the driver had exercised due caution and that the accident was not due to the driver's negligence.

The pamphlet may be secured from the Educators' Press, 50 East Broad Street, Columbus, Ohio. The price is fifty cents.

Who's Who in This Issue

The authors of articles in the current issue B. R. Buckingham, directing editor of elementary-school textbooks and partner of Ginn and Company. H. A. Curtis, superintendent of schools at Staunton, Illinois. E. W. Dolch, assistant professor of education at the University of Illinois. Agnes G. Gunderson, assistant professor of elementary education at the University of Wyoming. Thelma A. Knudson, director of speech correction in the Central Junior-Senior High School, South Bend, Indiana. Charles D. Dean, associate professor of education at the Eastern Montana State Normal School, Billings, Montana. Harold H. Punke, professor of education at Georgia State Womans College, Valdosta, Georgia. Katherine L. McLaughlin, professor of education at the University of California at Los Angeles.

The writers of reviews in the current issue C. L. Cushman, director of the Department of Research and Curriculum of the public schools at Denver, Colorado. Frederick S. Breed, associate professor of education at the University of Chicago. Herman G. Richey, assistant professor of education at the University of Chicago. C. W. Stone, professor of education at the State College of Washington, Pullman, Washington. Knute O. Broady, professor of school administration at the University of Nebraska. Don W. Gudakunst, M.D., commissioner of health of the state of Michigan.

ARITHMETIC AS A CONTRIBUTION TO A LIBERAL EDUCATION

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FIVE or six persons devoted to education and hence possessed of more than average intelligence are having luncheon. Each has ordered a different meal; each is expecting to settle his own account. The waiter, however, disregarding the request for separate checks, has brought in but one bill and has placed it before the most prosperous-looking person in the group. You have doubtless participated in such a luncheon. If you have, you appreciate the comedy which ensues as these table companions try to break down the total into the proper amount for each person and assess the tip which each should pay. Everybody talks, nobody thinks, and nobody has the right change.

Consider this problem: ". . . . radium is worth $25,000 a gram, with the present United States supply only 300 grams."[1] What is the value of the supply in the United States? Is your answer $750,000, $75,000,000, or $7,500,000?

Educators who have worked with graduate students know how furiously they will figure and how little their figures mean to them. These students represent the best product of our school system, yet they are often surprisingly lacking in number sense. They can count, but they cannot think. The evidence is all too impressive that the teaching and the learning of arithmetic in the public schools have failed dismally to secure a widespread intelligence in the use of number.

The school's task, in respect to arithmetic, is too exclusively understood to be the manipulation of symbols, called "computing." The school's task is, in reality, far more fundamental. It is nothing less than an attack on arithmetical illiteracy. There is an illiteracy in dealing with ideas expressed by numbers just as there is an illit-

[1]Robert B. Taft, "Radium Hounds," *Scientific American*, CLX (January, 1939), 8.

eracy in dealing with ideas expressed by words. In each case competence, or literacy, is something more than the manipulation of symbols. It is an appreciation of the meaning attached to the symbols and an ability to apply the symbols in order to facilitate thought.

Everybody is acquainted with persons who, although they may or may not have much formal schooling, possess to a high degree arithmetical competence. An arithmetically literate man will note and use, without comment and without delay, the average size of 2,668,514 farms whose total area is given as 48,504,612 acres. He senses and reacts appropriately to the implied percentage that Sudeten Germans, numbering 3.5 millions, are of a total population of 15 millions. Knowing that a meter is 39.37 inches, he does not fail to place the decimal point correctly in case he needs the equivalent of a millimeter. If the vote in a given state for his presidential candidate is reported as 564,709 against 275,418 for the next candidate, he instantly enriches the statement by the thought, "Beat him by 300,000," or "Licked him two to one." He possesses, moreover, a great deal of numerical tradition or lore, items which should be matters of common knowledge because such knowledge adds to a person's understanding of the world and of the people in it. A pound sterling is about five dollars, and a French franc is about three cents. Letter paper is eight and a half by eleven inches. Filing cards come in the sizes three and a half by five, four by six, and five by nine inches. Eighteen miles to the gallon of gasoline is good going. A property tax of twenty-five dollars a thousand on full valuation is high. Six per cent on money lent is no longer to be generally expected. A driving speed of more than fifty miles is dangerous.

Life in modern society is full of norms and standards. We are accustomed to suppose that measures of type and variation, such as averages and standard deviations, are only to be had through statistical manipulation. As a matter of fact, the experience of modern life provides us all with quantitative notions of type and variation. Unconsciously our experience puts meaning into the phenomena about us in much the same way that the statistician puts meaning into his observations through conscious manipulation of their measures.

That is not all. In ordinary social intercourse there is need of number. You can engage in no serious conversation without the necessity for understanding numerical relations. Getting the idea depends on following the thought of the speaker, and you cannot follow if you do not know where you are numerically. You do not even know when to agree, when to keep still, when to protest, or when to say "Oh, my!" You may not even be in the right decimal place. You may be thinking in thousands when you ought to be thinking in hundreds. This brings me to a topic which I think is exceedingly important.

One of the great words in arithmetic is "approximation." In life most numerical results are not exact. Measuring is always subject to error; so much so that a by no means unimportant topic in arithmetic for a liberal education should deal with the size, the importance, and the significance of error. In handling numbers, one should seek the degree of accuracy which will serve one's purpose; anything beyond that is a waste of effort.

There is another reason for intelligent approximation. When you hear an argument or read an exposition involving quantitative statements, you cannot follow the speaker or writer unless you can interpret his numbers. To be able to interpret, you must apprehend the numbers quickly and easily. It is hopeless, however, and unnecessay to attend to all the digits. In the case of large whole numbers, you will find it sufficient to deal with a few of the left-hand symbols. The rest you will disregard; this is the same as saying that you will treat them as zeros. In the case of decimals, you will attend to one or two significant figures only, and, again, these will be on the left. Here is a place for the practical numerical judgment which the arithmetically literate person knows how to exercise.

This kind of judgment does not arise through drill in computing. It can only be learned through the practice of judgment under defined conditions. Such practice may be provided in school through floor talks, committee reports, and the systematic use of reading matter which involves numbers and quantitative data.

The point I am making is that, in following a speaker or in reading printed matter, you approximate by using a few left-hand figures. If you are skilful, you exercise critical judgment as you approxi-

mate. Moreover, if you compute as you go along, you do so, not from the right, as you were taught in school, but from the left.

A great deal of experience is needed—experience of a kind seldom furnished in an arithmetic class—before one can read or hear quantitative data with ease and enjoyment. There is no surer way to kill a speech than to put figures into it, not because the figures are unimportant (they may well be the most important part of the message), but because a large part of the audience lacks that portion of a liberal education which arithmetic, rightly learned, can confer.

I like to think that the restless gropings of educational thinkers during the past twenty-five years have finally emerged into a conception of arithmetic which is no longer satisfied with the speed-and-accuracy formula of the second and the third decades of the present century. Speed and accuracy are partly by-products—by-products of an ability to see and to appreciate number in life about us, an ability to think in quantitative terms, an ability to act intelligently under the guidance of number. The possession of this ability I regard as a unique item in a liberal education. What I am saying, therefore, is that arithmetic is a contribution to a liberal education.

This conception of arithmetic is making over the whole subject. Furthermore, it is giving arithmetic an importance never before possessed by that subject. Arithmetic is no longer a bag of tricks, no longer something to puzzle little children. It takes on somewhat of the dignity that arithmetic had as an honored subject in the curriculum of ancient Greece, although it is, at the same time, quite different from, and superior to, the subject matter to which the Greeks applied the term *arithmetike*.

The arithmetic which I regard as contributory to a liberal education begins early in the course of study and lasts a long time. It is a proper field of teaching and learning for the first-grade child, and it might well receive greater attention than is now being devoted to it in the junior and senior high schools. To my mind, those who have participated in what I have elsewhere called "a flight from arithmetic" have done so because they have conceived arithmetic too narrowly. If the task of arithmetic is merely to develop computers in the sense of manipulators of symbols, where rule of thumb is the

only guide and where drill is the only method, then a flight from arithmetic is justified, and those who say, in substance, "This is a dreary subject and a difficult one. Let's postpone it until the third, the fifth, or the seventh grade"—I say, these people are quite logical in their conclusions. The trouble is not with their logic but with their premises. Their assumptions are wrong. Change these assumptions, give to arithmetic the dignity and the importance not only of a major contributor, but of a unique contributor, to a liberal education, and a flight from arithmetic is no longer possible. Thought and action take an entirely different direction. The sterile discussions which have long characterized the literature of arithmetic, mere changes of method to an unchanging end, become trivial. Larger purposes bring more penetrating analysis of means to higher ends. We are driven back to a deeper consideration of our postulates.

Number is man-made. Although it is used everywhere in the world, it has no material existence anywhere. Only as man has manipulated things having extension and plurality, has he developed number ideas. When it is realized that number has risen in the mind of man as he has manipulated things to serve his needs, the notion of the way to proceed in school is fundamentally different from the notion that prevails when the prime object of arithmetic is held to be the manipulation of symbols with speed and accuracy. The essential thing is to give the child experience out of which he may build number ideas for himself; for nothing is surer than that number ideas, to be vivid, flexible, and versatile, must arise from firsthand experience.

Obviously, giving this experience takes time. Therefore, if arithmetic is to serve its best purpose, it must begin early. I have no patience with those who would defer the right kind of arithmetic to the middle grades. Concrete arithmetic should begin as early as any educative experience begins.

Arithmetic so viewed is essentially a social study. It is a social study because it is the only area of learning available to all the people for the establishing of order, of system, of accuracy, and of punctuality. Amid all the diversity of languages, the one language common to civilized men everywhere is the language of arithmetic.

I hardly need to say that number is explicit and implicit in all

the affairs of life. As we pass in these days from an economic era of laissez faire to one of scientific and political control, it is clear that our citizenry must, as never before, acquire a new sense of mathematical power, insight, and confidence. Too often in the past it has been said, "Let the experts do our figuring," or "Let the calculating machines add and subtract for us." The world is full of tragic human wreckage because folks let someone else do their figuring. The sharper and the mountebank, the swindler and the confidence man are good at figures.

Arithmetic is a social study for another reason. It has a remarkable history. The evolution of the number system is an illuminating chapter in social progress. For thousands of years within the period of recorded history—and for nobody knows how long before—man was obliged to do his computing by means of an instrument. He used stones, knotted strings, sticks with notches in them, and finally a form of abacus; but nowhere, until the Hindu-Arabic system came into use, with its zero as a place-holder, did anyone have a notion of performing operations with the number symbols themselves. Thus it came about that our form of notation, unlike the notations which were supplanted, actually expressed number in a way to assist thinking.

Moreover, this notation has been a powerful contributor to the development of mathematics. Not long after the Hindu-Arabic system became generally known in Europe, that remarkable development of the system to the right of units' place, which we call decimals, was invented. Then came a further development, also due to the peculiar place system which we enjoy, namely, the development of logarithms, the idea that any number may be represented as a power of 10. Without these direct developments of our system of notation, mechanics and astronomy would be crippled; physics, navigation, and surveying would advance with difficulty.

Again, our system of notation has contributed enormously to the management of modern affairs. It is difficult to see how our large enterprises, requiring complicated systems of records and accounts, could be carried on without the brevity and the portability of numerical data which our notation permits. The heavy demands of modern business on computation of all kinds are generally recog-

nized. The clumsy systems which preceded the Hindu-Arabic system would be utterly incapable of meeting these demands. Much scientific work, depending as it does on the massing of numerically expressed observations, would likewise be handicapped.

If our system of notation is as important as all this, it is clear that the school curriculum in arithmetic should take due account of this fact. I venture to say that it is not doing so. Not only a new chapter in arithmetic, but a new point of view throughout the entire range of the subject, would be justified by the significance of the number system as a system. If a child knows the number system well, he will never have to learn as an abstract rule the fact that three-fourths of a number is three times as much as one-fourth of it, nor the fact that dividing by one-third is numerically the same as multiplying by three, nor the further fact that dividing by two-thirds will be half as much as dividing by one-third. He will not misplace the decimal point in dividing because his lively sense of the meaning of numbers will make any but the correct location of the point an absurdity. He will be able to estimate in advance the approximate size of his results, and he will thus be furnished with a critical instrument to apply to his results after he has obtained them.

There is a broader sense in which arithmetic can make a contribution through the fact that it is a system rather than a series of unrelated items. All its parts hang together. If a liberalizing result is to be secured from the study of arithmetic, it must be learned as a system. Dewey says that "training by isolated exercises leaves no deposit, leads nowhere; and even the technical skill acquired has little radiating power, or transferable value."[1]

These are magic words: "radiating power," "transferable value." When arithmetic is taught with such power and such value, the result is what I am calling "a contribution to a liberal education."

[1]John Dewey, *How We Think*, p. 191. Boston: D. C. Heath & Co., 1910.

DO SPELLING-BOOKS TEACH SPELLING?

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PURPOSE AND PROCEDURE OF THE INVESTIGATION

CHILDREN do learn to spell. Can teachers claim, however, that this learning is a result of their teaching? The schools have in the past generally made that claim. Is it well founded? As a means of investigating this situation, a simple but thorough experiment was tried out in the schools of Staunton, Illinois. The results were rather surprising and should cause educators to re-evaluate all the work in spelling, especially that which follows day by day the present standard textbooks in spelling.

The pupils of the Staunton schools for three and a half years used a standard series of workbook spellers which were made by specialists in the field and which are widely known and used throughout the country. The day-by-day directions of these spellers were carefully followed. From all appearances, the teachers were doing the correct thing in the correct way and were securing typically good results. Certain indications, however, caused the superintendent to wonder exactly what function the textbook was serving in the children's learning of spelling. He therefore devised a testing program to secure evidence on this point.

For testing purposes a spelling list was made up of seventy words from each book from Grade II to Grade VII and eighty words from Book VIII, a total of five hundred words. These were chosen at random and represented one word out of each 7.63 words in the entire spelling program. From these five hundred words, ten tests of fifty words were made, each test consisting of seven words from each of Grades II–VII, inclusive, and eight words from Grade VIII. The tests provided for pronunciation of each word, use in a sentence, and

a final pronunciation. The tests were mimeographed. All tests, with directions for administering and scoring, were assembled in booklet form, and a copy of the booklet was placed in the hands of every teacher. Each Friday the same list was given in the same manner by all teachers in all grades. This testing was done for ten consecutive Fridays, starting five weeks before February 1, 1938, and ending five weeks after that date.

Each teacher understood that the purpose of the tests was to evaluate the whole spelling program, not to ascertain the effectiveness of the individual teacher's work. There were no intimations at the time, and there have been no indications since, that any teacher did not do his best to secure an impartial score for his room.

The results for each class were recorded on a report form. For each test the forms provided fifty consecutively numbered spaces after each child's name. The teacher indicated in the proper space whether the child spelled correctly the word corresponding to each number. Thus, if a particular child misspelled words numbered 20, 35, and 45, marks were placed in the spaces which were so numbered. The records, therefore, showed how each child from Grade II to Grade VIII spelled each of the five hundred words selected from the spelling books for Grade II to Grade VIII. They also showed whether the child had already encountered that word in his spelling lesson. From these data the conclusions of this study were made.

GRADE RESULTS

Grade results were first computed. Computations were made of (1) the average percentage of correct spellings by each grade of the words that they had studied in their books during the twelve calendar months prior to the date of the test, (2) the average percentage of correct spellings of the words studied previous to the past twelve months, and (3) the average percentage of correct spellings of the words not yet studied. These grade results are shown in Table 1.

By reading the table horizontally, one may secure information concerning the ability of each grade to spell the words in each of the groups designated at the top of the columns. To examine the scores made throughout the grades on any specified word group, the table should be read vertically. For instance, the percentages of correct

spellings of words in the fifth-grade group were 9.5 for the second-grade pupils, 36.9 per cent for the third-grade pupils, and so on.

The scores underlined diagonally across the table are those earned on the word group which each grade had studied during the twelve months just before the dates of testing. These scores range from about 60 per cent to 90 per cent, most of them being near 80 per cent. These percentages seem to indicate satisfactory learning, as a grade average, resulting from routine teaching. It must be remembered

TABLE 1

AVERAGE SCORES OF EACH GRADE ON WORDS TAUGHT TO EACH OF GRADES II–VIII

Grade Tested	Percentage of Correct Spellings of Words Taught in Grade								
	II	III	IV	V	VI	VII	VIII	Not Taught	Total
II	58.6	22.9	11.8	9.5	7.0	4.8	3.5	2.6	13.5
III	79.7	71.8	41.4	36.9	24.0	18.4	14.4	10.5	36.6
IV	86.1	79.6	77.4	56.8	43.8	32.3	28.3	23.1	53.6
V	86.8	83.7	75.5	75.8	58.4	47.9	37.8	39.9	63.2
VI	96.5	95.1	90.5	89.1	90.0	71.2	63.1	65.5	82.9
VII	94.6	93.6	85.6	84.5	83.9	80.2	64.2	67.1	81.8
VIII	98.1	97.4	93.2	91.9	90.6	87.1	85.2	82.3	90.8

that these words were not merely those taught during the current week. They were taken from all the words taught in the twelve calendar months prior to testing. For this reason the average seems high.

When one looks at the scores above those which are underlined, a different conclusion is suggested. These scores show the percentages of correct spellings of words *before the children had studied the words.* Sometimes these scores are very close to the scores made after study; for instance, the sixth-grade children, without study, made a score of 71.2 per cent on the seventh-grade words, while the seventh-grade pupils, after study, made a score of 80.2 per cent on these same words. The scores above the lines indicate that in some cases, two years before they had studied the words, children did more than

half as well as the children who had just studied the words. In short, these figures indicate that an astonishing amount of learning of spelling takes place without any formal study and takes place years before the words are supposed, by the authors of this typical spelling textbook, to become appropriate for learning.

It is also interesting to look at the figures *below* the lines. These show that in most cases the children kept on learning how to spell these words year after year, after the teaching of the words had ceased. For instance, the second-grade pupils made a score of only 58.6 per cent on the second-grade words, but learning of these same words had kept on year after year without teaching until the eighth-grade pupils made a score of 98.1 per cent. Here again there was learning of spelling without teaching.

Finally, there was a group of words which in Table 1 is designated "Not Taught." These were words which are assigned to the latter half of Grade VIII and which had not been taught at all up to the time of testing, because the testing came in the middle of the year. Each grade spelled some of these words correctly, and the eighth-grade pupils made a score of 82.3 per cent.

This table conclusively shows that most of the learning of spelling in the Staunton schools was done either before the year in which the words were taught or after the year in which they were taught. It has been pointed out that grade scores on words taught ranged from 60 per cent to 90 per cent and that these percentages would ordinarily be considered satisfactory results of teaching. If, however, the score *after* teaching is subtracted from the score *before* teaching, Table 1 shows a very small gain from the daily grind of spelling lessons.

RESULTS SHOWN BY ANALYSIS OF INDIVIDUAL SCORES

The figures in Table 1 are misleading because they are averages. For instance, the table shows that in Grade II the average percentage of correct spellings on the second-grade list was 58.6. The individual results show, however, that the lower end of the grade spelled hardly any of these words correctly, whereas the upper end of the class spelled nearly all of them correctly. Every figure in Table 1 must be interpreted in a similar way. Table 1 gives the

grade averages, but the scores of individual children range all the way from almost zero to almost 100 per cent. In every grade there was a wide range.

The range within each grade is of special importance with respect to the learning of spelling before teaching. Characteristically, the upper end of the class spelled words far beyond their grade, and the lower end did not learn words until the words were taught. Table 2 shows the spelling achievement of the second-grade pupils divided into ten groups according to their total scores.

TABLE 2

SPELLING ACHIEVEMENT OF SECOND-GRADE PUPILS DIVIDED INTO TEN GROUPS ACCORDING TO SCORE ON TOTAL TEST*

Score on Total Test	Percentage of Correct Spellings of Words Taught in Grade							
	II	III	IV	V	VI	VII	VIII	Not Taught
91–100	92	66	58	47	28	26	16	13
81– 90	85	50	26	21	13	9	8	5
71– 80	75	35	18	14	10	6	5	3
61– 70	70	26	12	10	7	5	2	2
51– 60	65	20	8	4	5	3	1	1
41– 50	57	15	6	2	5	2	0	0
31– 40	46	11	4	2	3	1	0	0
21– 30	36	8	2	1	2	0	0	0
11– 20	28	3	0	0	1	0	0	0
0– 10	11	1	0	0	0	0	0	0

* The figures across the table show that, for pupils in the highest tenth of Grade II, the average percentage of correct spellings of second-grade words was 92; of third-grade words, 66; of fourth-grade words, 58; and so on.

For the uppermost tenth of Grade II, the average percentage of correct spellings of second-grade words was 92; of third-grade words, 66; and so on, to 16 for eighth-grade words. For the next lower group the average percentage of correct spellings of second-grade words was 85; of third-grade words, 50; and so on, to 8 for eighth-grade words. Each lower group did less well until for the lowest group the average percentage of correct spellings of second-grade words was only 11; of third-grade words, 1; and of words above the third-grade level, 0. The average figures for Grade II given in Table 1 are correct only for the spelling of the center groups of the grade. They are not correct for the greatest number of children, who are shown by Table

2 to have done either distinctly better or distinctly worse than the center groups. This important fact holds for all grades, though space permits a detailed analysis of Grade II only.

The statement, suggested in the last section, that spelling is learned without being taught is now seen to be incorrect. It is more correct to say that spelling is learned by some children without teaching but by others only after teaching, even if then. It seems suggested, therefore, that classes should be divided and that certain children should be excused from spelling. Obviously many children are suffering a tremendous loss of time in sitting through spelling lessons that they do not need.

RESULTS ON DIFFERENT WORDS

It has been pointed out that children differ in spelling ability, and it must now be emphasized that words also differ in spelling difficulty. It has been suggested that some children learn spelling without being taught but that other children need much teaching. The results of this experiment also suggest that certain words do not need to be taught whereas others do need real teaching.

As explained above, this study yielded the record of each child on every word of the five hundred included in the experiment. From these records it was possible to tell what happened to each word in each grade. Table 3 gives the results on ten typical words for Grade V. The second column shows the percentage of fourth-grade children who spelled these words correctly before they were taught. It will be noticed that the word "address" was spelled correctly by 83 per cent of these children who had not yet studied it, whereas "certain" was spelled correctly by only 2 per cent before studying. The other words range between these extremes. On the basis of learning without study, these ten words vary greatly, and the same is true for all the five hundred words tested.

The last two columns show what happened to the words after they were taught. Here the results are shown in terms of learning by the highest quarter of the grade and the lowest quarter of the grade. Satisfactory learning was assumed to be 90 per cent, since this score happened to be the passing mark in spelling in the local system. The two last columns, therefore, show at what grade level these words

were actually spelled correctly by 90 per cent of the highest and the lowest quarters of the grade. Here the results also show great difference in difficulty between words. Two words ("bones" and "boots") were known by the good spellers as early as Grade III but were not known to the poor spellers until Grade VI. Five of the

TABLE 3

SPELLING ACHIEVEMENT ON TEN FIFTH-GRADE WORDS BY FOURTH-GRADE PUPILS BEFORE STUDYING THE WORDS AND BY HIGHEST AND LOWEST QUARTERS OF PUPILS DIVIDED ACCORDING TO SCORE ON TOTAL TEST *

Word	Percentage of Pupils in Grade IV Knowing Word in Year Prior To Teaching	Grade at Which Ability To Spell Word Was Attained by 90 Per Cent of—	
		Highest Quarter of the Grade	Lowest Quarter of the Grade
address	83	IV	.....
aim	37	V	VI
appeared	25	V	.....
bones	71	III	VI
boots	77	III	VI
breath	67	IV	VI
certain	2	V	.....
chief	41	V	VIII
cities	27	V	VI
contest	70	IV	.....

*"Address," a word taught in Grade [illegible] 83 per cent of the children in Grade IV. The [illegible] y 90 per cent of the highest quarter of Grad[illegible] cor-rectly by 90 per cent of the lowest quar[illegible] e.

words were not known even by the good spellers until the words were taught in Grade V, and two of these ("appeared" and "certain") never became known to the poor spellers, even in Grade VIII. Half of the words had to be taught to the good spellers, or were learned by them in Grade V, where the words were taught; and half of the words did not need to be taught to these good spellers because they knew the words before reaching Grade V. The last column shows that all ten of these words needed to be taught to the poor spellers and that, even then, the teaching did not cause them to reach 90 per cent in Grade V.

CONCLUSIONS

The figures from this testing program seem to say three things: (1) Most of the learning of spelling seems to be done before the year of teaching or after that year. (2) The good spellers do most of the learning without teaching, while the poor spellers apparently need the teaching and even more teaching than is given them. (3) Certain easy words, rather than all words, are learned without teaching by the good spellers. Hard words are not even learned through teaching by poor spellers, many of these words never being learned at all by this group.

If these data represent fairly the results from a conscientious use of a workbook speller throughout the grades during a period of years, what practical conclusions may be drawn by the school superintendent? This question cannot be answered by citing experiences of other cities with other teachers, other methods, and other sets of conditions; the teachers of Staunton, with their superintendent, need to work out a plan which suits best their situation. What schemes, then, should they try? Three lines of study seem suggested by this experiment.

First, work might be done with the word list. In this system, apparently, some of the words need not be taught but are satisfactorily learned without teaching. Other words seem not to be learned sufficiently well under the present teaching and need to be included in a review system. The textbook now being used does not contain a system of review of hard words. A revision of the word list would, therefore, include omission of words, change of grade placement of words, review of words, and addition of words suggested by school subjects and local situations.

A second line of work might deal with the pupils. It might include excusing certain pupils from spelling lessons after they had passed proficiency tests. These tests would be intended to show which pupils have the ability to learn spelling by themselves. These pupils would have to pass spelling-ability tests at regular intervals throughout the year to show that they continue to make use of their ability.

Third, various plans might be followed in which efforts are made to allow both for differences in children and for differences in words. In the test-study method this end is sought. The object of the first

test is to find out which children know which words, and the assumption is that each child then has his own list to study. This method could be tried with the same books which the system is now using. In the test-study method, however, the assumption is that, when a word is unknown to a child on the pretest, the child must study that word. The data presented in this article seem to indicate that, if the child is bright, he will probably learn the word later without study. Another method of adjusting both to pupil and to words is for each child to keep a spelling notebook in which he develops his own list. This method is pursued by teachers everywhere as the best application of the principle of learning on a basis of need, but it entails an amount of attention from which most teachers shrink.

The question, "Do spelling-books teach spelling?" does not seem to have a simple answer. At least this investigation points out that it is not entirely satisfactory merely to buy a good spelling-book and carefully to follow its directions. Much still needs to be determined before a particular faculty knows just what the school should do about spelling. One solution is the adoption of a thorough language-arts program. Such a program gives attention to words primarily as tools of thought and expression, but it brings in, at appropriate points, attention to word forms and to ways of learning word forms and thus encourages the continual, natural learning of spelling.

SIMPLIFIED PHONICS

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READING is the only one of the three R's that still retains the prestige which it once had in the schools. The typewriter has supplanted the penman; the adding machine and the calculator are taking the place of the expert in figuring; but so far there is no machine for reading and interpreting the printed page (3).

The times, with the enormous amount of available reading material and the increasing need for wide reading, demand that the child read with fluency and comprehension. To read fluently and comprehendingly, he must recognize words with ease and facility, and it therefore becomes an essential duty of the school to provide the child with effective methods of recognizing words.

Gates lists the following methods of studying and recognizing words: "(1) dependence upon striking characters, (2) dependence upon the general configuration, (3) use of letters, the spelling method, (4) phonetic analysis, (5) syllabification, (6) visual analysis of words, (7) dependence upon context, (8) versatility of attack" (17: 235).

Phonic analysis, the method of teaching word recognition which is the favorite in American schools, has been praised and blamed, but the general opinion still is that it has a recognized place in the reading program. Gates says: "The great mistake in American teaching has been the assumption that phonetic skill was all important and sufficient, that the other types of training could be neglected, and that the more phonetic experience the pupil got the better" (17: 238).

In the literature on the teaching of phonics, pro and con, the following advantages are claimed: training in phonics makes for independence in the recognition and the pronunciation of words; it is an aid in spelling; and it furnishes pupils with a method of

attack on new words. The objections are: overemphasis on phonics may result in slow, stammering reading, poor comprehension, and a slower rate of progress in the primary grades; and it may make children so word-conscious that they lose interest in meaning. The traditional methods of teaching phonics do not provide for versatility in the use of two or more methods of recognizing words. In brief, the feeling is that a reasonable amount of phonics, correctly taught, is desirable. Dolch says:

> In times past, the abuses in the teaching of phonics have called for sharp criticism and evaluation. It seems that the time has now come for constructive studies and for answers to the questions: (1) What phonics should be taught? (2) When should such phonics be taught? and (3) How should such phonics be taught? [9: 120.]

These same issues are raised in a Research Bulletin of the National Education Association (1).

WHEN SHOULD PHONICS BE TAUGHT?

There is a decided tendency to prolong the period of preliminary preparation and to postpone the teaching of phonics until the child has learned to notice similarities and differences in words and has acquired a sight vocabulary of from sixty to a hundred words or more. Dolch and Bloomster say:

> The general agreement is that it [phonic attack] must follow some certain amount of sight recognition. . . . .
>
> To learn phonic analysis of words and to use the results of such analysis surely requires more mental ability than that used in sight recognition or, at least, a different type of mental ability. . . . .
>
> Phonic readiness comes at some time later than sight readiness [10: 201–2].

These two investigators found in their experiment that children of high mental ages sometimes fail to acquire phonic ability but that children of low mental ability are certain to fail. Children with mental ages below seven years made only chance scores. As far as this experiment indicates, a mental age of seven years seems to be the lowest at which a child can be expected to use phonics, even in simple situations. The study suggests that the schools are perhaps expecting results from phonics-teaching far too soon. Davidson (5) found that, until children attain a mental age of at least seven and a half years, they have difficulty in distinguishing the letters *b*, *d*, *p*,

and *q*. In the light of these findings it is probable that only the simple consonant sounds should be taught in Grade I.

HOW SHOULD PHONICS BE TAUGHT?

Recent literature on phonics warns of the danger of overemphasizing phonics and the teaching verbatim of a great number of phonograms. There is a tendency to bring phonic work into closer relation with the reading program and to limit drill to the child's discovery of the knack of recognizing and blending sounds and phonograms into words (1, 18).

Dickson (6) found that the analytic-synthetic method is preferred. The majority of authorities make a division between the initial consonant and the final phonogram as "c-at." Gates says: "Especially avoid the attempted sounding of small phonetic units that cannot be sounded correctly except in combination" (17: 317–18). Stone says: "After the child has acquired adequate phonetic knowledge he should be trained to focus upon the initial letter or letters, getting in mind the initial sound (or motor equivalent); then to look forward to see the remaining part of the word; then to return the eyes to the beginning of the word and say the word as a whole" (24: 404–5).

WHAT PHONICS SHOULD BE TAUGHT?

The question of subject matter is perhaps not so easily answered. While there is no close agreement concerning the phonetic elements which should be taught, there is a distinct tendency to emphasize those phonograms appearing frequently in the most commonly used words (6, 9). It is encouraging to note Gates's caution to "teach no more specific phonograms than may be necessary to give the pupil skill enough to learn the remainder by himself" (17: 317).

I should like to make a plea for simplified phonics, particularly in Grades I and II. In looking over reading manuals and courses of study, one is amazed at the large number of phonograms that children are expected to learn. In ten reading manuals published within the last three years,[1] the number of phonograms to be taught in

[1] See the list of reading manuals appearing at the end of the article.

TABLE 1

PHONOGRAMS LISTED IN TEN READING MANUALS FOR TEACHING IN GRADES I AND II*

Phonogram	Frequency	Elson-Gray	Unit-Activity	New Path to Reading	Guidance in Reading	Child Development	Friendly Hour	Alice and Jerry	Child's Own Way	Happy Road to Reading	Children's Bookshelf
able	1						X				
ace	1						X				
ack	3					X	X			X-1	
ai	4					X	X			X	X
ain	1						X				
air	1						X				
ake	4		X			X	X-1			X	
al	2		X				X				
ame	1						X-1				
ang	3					X	X	X			
ap	1						X-1				
ar	7	X-1		X		X	X	X-1	X-1	X	
ãre	1						X				
ark	1						X				
atch	1						X				
aw	5	X		X		X-1	X	X-1			
ay	8	X-1	X		X-1	X-1	X-1	X-1		X-1	X
ēa	4					X	X			X	X
ĕa	1					X					
ĕad	1						X				
ear	1						X				
ed(t)	2					X					X
ed	9	X-1	X-1	X		X-1	X-1	X-1	X-1	X-1	X-1
ee	6	X-1	X			X-1	X-1			X	X
ell	6	X-1	X		X-1	X	X			X	
en	6	X	X		X-1	X	X-1		X-1		
er	10	X-1	X	X	X-1	X-1	X-1	X-1	X-1	X	X-1
ent	1									X	
es	8	X	X	X		X-1	X	X		X	X-1
est	8	X-1		X	X-1		X-1	X-1	X-1	X	X
et	4	X-1	X		X-1		X-1				
ew	3			X				X-1	X-1		
ick	3					X	X			X	
ide	1						X-1				
īe	3			X		X					X
īē	1					X					
ig	1						X-1				
igh	2					X		X			
ight	7	X-1	X	X		X-1	X	X-1		X-1	
ine	1						X-1				
ing	10	X-1	X-1	X	X-1	X-1	X-1	X-1	X-1	X-1	X-1
ink	1			X							
ir	7	X		X		X	X	X-1	X-1	X	
ish	1					X					

* Phonograms followed by "X-1" are suggested for first-grade work.

TABLE 1—*Continued*

Phonogram	Frequency	Elson-Gray	Unit-Activity	New Path to Reading	Guidance in Reading	Child Development	Friendly Hour	Alice and Jerry	Child's Own Way	Happy Road to Reading	Children's Bookshelf
oa	3					X				X	X
ock	3					X	X			X	
oi	5			X		X		X-1	X-1	X	
oil	1						X				
oke	1						X				
ong	2						X	X			
oo	6	X-1	X	X		X-1		X-1		X	
oo	5		X	X		X		X-1		X	
ook	3				X-1		X			X-1	
oon	1						X				
op	2					X-1	X-1				
ore	1							X-1			
ose	1						X-1				
ot	2		X				X-1				
ou	7	X-1	X	X		X-1		X-1	X-1	X	
ought	1				X-1						
ound	2						X			X	
ow	9	X-1	X	X	X-1	X-1	X	X-1	X-1	X	
ow(ō)	5			X		X	X	X-1		X	
own	1						X				
ox	1						X				
oy	7			X	X-1	X-1	X	X-1	X-1	X	
uck	2					X				X	
um	1					X					
ump	1					X-1					
un	6		X		X	X	X-1			X-1	X
ung	1						X				
ur	7	X		X		X	X	X-1	X-1	X	
ut	1						X-1				
Total		18	18	20	12	39	54	23	13	31	13

Grades I and II ranges from twelve in one manual to fifty-four in another, not including consonant blends and digraphs or words. The phonograms suggested in these ten manuals are shown in Table 1. When one considers that there are 104 ways of representing 13 vowel sounds and that one vowel may have from 26 to 30 functions (30), one realizes what an enormous task it is for a seven-year-old child to learn all the ways of expressing vowel sounds.

Because certain phonograms, such as *all*, *an*, *and*, *at*, *in*, *old*, *or*, are words which occur frequently in the child's reading, he must learn these anyway; using them as phonograms does not add to his vocabulary load. Since some phonograms, *ed*, *en*, *er*, *est*, *un*, are

also prefixes or suffixes, there may be a reason for teaching them. However, they may be postponed until prefixes and suffixes are taught as such—in Grade III or IV. The double-vowel phonograms (with the first vowel long and the second silent), as in "meat," "pail," "goat," "rode," and "time," may be grouped and taught in one lesson. I have found that children have no more difficulty with the group than with one phonogram, for example, *ae* as in "came," if their attention is called to the generalization that only four letters (*a*, *e*, *i*, *o*) "take partners" and that only these same four letters can "be partners."[1] The vowel *u* is omitted because the words in which *u* has a long sound—"blue," "true," etc.—are seldom used in primary readers and can be learned as sight words. In this way the number of vowels to which the "partner" rule applies is kept to a minimum. Only a few phonograms should be taught, but those few should be the phonograms with high frequency in order that phonics may not become an additional burden for the child but may be made a means of easing the reading task. Instead of the rule that final *e* makes the preceding vowel "say its name," the child learns the rule that a letter, when taking a "partner," always says its name and the "partner" is silent. A sampling analysis (every tenth page) of six recently published second readers shows that one word in twelve comes under this rule. Teaching the double-vowel phonograms in this way will remove seventeen phonograms from the composite list given in Table 1.

The phonograms *er*, *ir*, and *ur* may be omitted and letter phonics be substituted. They have the same sound as the consonant *r*, as is seen in the following words:[2] "purred," "older," "clever," "hurt," "person," "purple." Since the child already knows the consonant sound of *r*, it seems a wasteful burden to add three extra forms for the same sound.

Because the short sounds of the vowels are similar and therefore difficult to discriminate, particularly for a child who has had little

[1] There are exceptions to the rule because our language is not phonetic. Adjacent vowels are not always "partners," but, when they are "partners," the first says the name.

[2] Letters and words underlined are those to which the teacher calls attention as aids in pronouncing unfamiliar words.

experience with phonetics, it seems wise to eliminate as many as possible of these meaningless word elements, such as *ack, ock, uck, ick, ut, ot, et,* and *ell,* and to substitute letter phonics. Letter phonics, together with context clues, prove helpful, as in the words "spend," "black," "pocket," "cricket," "crackers," "butter," "speckled," "struck," "spill." True, the child may not always get the exact pronunciation, but, by using the context clue, he will probably know what the word should be, since most of the words in a young child's reading are already in his speaking vocabulary. Dolch says: "Teaching of letter phonics is characteristic of all systems. . . . . Since all words are made up of letters, it is obvious that letter phonics will help to some extent in the sounding-out of any words, short or long. . . . . Letter phonics is and always will be of constant usefulness in reading" (9: 121–24). Letter phonics cannot replace the learning of phonograms, nor is it desirable for a child to attack an unfamiliar word letter by letter. The child, however, should be able to pick out quickly those elements in a word that are the most likely to help him—and these elements will be consonants because a consonant (in most instances) has only one sound and can therefore be depended on. The following words illustrate how letter phonics can aid in the pronunciation of words: "smells," "thimble," "restaurant," "letter," "front," "dinner," "dressed."

According to these arguments the list of phonograms given in Table 1 may be reclassified as is shown in Table 2.

Before a phonogram is included in the list to be taught, it should be evaluated according to the following criteria: (1) Is this phonogram a clue to a sufficient number of words in the child's reading vocabulary to make the teaching of it worth while? (2) Is this phonogram of more value than any other clue to the recognition of the word? It is difficult to say just how many phonograms need to be taught, but perhaps not more than ten, excluding words, consonant blends, suffixes, and prefixes.

The following has comprised the subject matter for vocabulary study as taught for the last three years in Grade II of the elementary training school in the University of Wyoming: (1) review of simple consonant sounds; (2) sight words on Dolch's list (7: 458–59); (3) consonant digraphs: *ch, sh, th, wh;* (4) consonant blends, such as *bl,*

br, fl, fr, gr, gl, sm, str, tr; (5) double vowels: combinations of *a, e, i, o;* (6) the phonograms *ing, ay, ar, aw, oi, oy, ow, ight.* These items have been found to give a sufficient amount of phonic knowledge for the second-grade child. By the end of Grade II the pupil should use several techniques in gaining independence in reading: recognize

TABLE 2

SIMPLIFIED CLASSIFICATION OF PHONOGRAMS TO BE TAUGHT IN GRADES I AND II

Prefix or Suffix	Difficult Phonograms	Unnecessary Phonograms	Double-Vowel Phonograms	Preferred Phonograms
ed	ack	ark	able	ar
en	al	atch	ace	aw
es	ang	ear	ai	ay
est	ap	ell	ain	ight
un	ăa	ent	air	ing
	ăad	er	ake	oi
	et	iē	ame	oo
	ew	ig	āre	oo (look)
	ick	igh	ēa	ou
	ock	ink	ee	ow
	ong	ir	ide	ow (show)
	op	ish	īe	oy
	ot	oil	ine	
	uck	ook	oa	
	um	oon	oke	
	ung	ought	ore	
	ut	ound	ose	
		own		
		ox		
		ump		
		ur		
		ed (t)		

and apply the preferred phonograms, the double-vowel rule, letter phonics, context clues, and initial sound of the word. If he uses these methods, he is well on the way to becoming an efficient reader.

PHONICS IN INTERMEDIATE GRADES

Dolch has raised a vital question: "Since primary phonics mean letter phonics or phonogram phonics, can these types of phonic-teaching help in the sounding-out of polysyllables which children must do in the nine years of school after the primary grades?" (9: 122.) Dolch found that the important phonograms usually taught in the primary grades are not syllables in polysyllabic words

and are, therefore, of doubtful value in the sounding of polysyllables. He says: "What the schools definitely need is a teaching of the phonics of polysyllables. . . . . Facility in attacking polysyllables will go far in eliminating much of the remedial work in reading in the upper grades and in high school" (9: 124).

It has been the tendency to charge the primary teacher with full responsibility for providing every pupil with a method for becoming an independent reader. Since, as Dolch has pointed out, children need to sound out polysyllables during all their years of reading, the teacher in the intermediate grades must continue phonic analysis, as well as other techniques of word recognition, to the end that every child may become an efficient reader. A list of phonograms and other helps useful in sounding out polysyllabic words would be a worth-while contribution to the field of intermediate-grade reading.

READING MANUALS ANALYZED

GRAY, WILLIAM S., and LIEK, EDNA B. *Syllabus of Phonics as Given in the Teacher's Guidebooks for the Elson-Gray Basic Readers.* Chicago: Scott, Foresman & Co., 1936.

SMITH, NILA BANTON. *Word Recognition and Discrimination Development in the Unit-Activity Reading Program.* New York: Silver Burdett Co., 1936–37.

CORDTS, ANNA DOROTHEA. *The New Path to Reading:* Manual in Reading and Phonics To Go with Books II and III. Boston: Ginn & Co., 1935.

STORM, GRACE E. *Guidance in Reading Series:* Teacher's Guide for Grade Two. Chicago: Lyons & Carnahan, 1936.

HARRIS, JULIA M. *The Child Development Readers:* Second Grade Manual To Accompany "Visits Here and There." Boston: Houghton Mifflin Co., 1936.

LEAVELL, ULLIN W., BRECKINRIDGE, ELIZABETH G., BROWNING, MARY, and FOLLIS, HATTIE. *The Friendly Hour:* Teachers' Manual for the First Year *and* for the Second Year. Chicago: American Book Co., 1936.

O'DONNELL, MABEL, and CAREY, Alice. *The Alice and Jerry Books:* Guidebook for Teachers for First Year *and* for Second Year. Evanston, Illinois: Row, Peterson & Co., 1936.

HARDY, MARJORIE. *The Child's Own Way Series:* Teachers' Manual for the Hardy Readers. Chicago: Wheeler Publishing Co., 1938 (revised).

DOPP, KATHERINE E., PITTS, MAY, and GARRISON, S. C. *Happy Road to Reading:* Second Year Manual. Chicago: Rand McNally & Co., 1935.

BUCKINGHAM, B. R., and DOWNEY, LILLIAN A. *The Children's Bookshelf:* Teachers' Manual for "Munching Peter and Other Stories." Boston: Ginn & Co., 1937.

BIBLIOGRAPHY

1. *Better Reading Instruction.* Research Bulletin of the National Education Association, Vol. XIII, No. 5. Washington: Research Division of the National Education Association, 1935.
2. BETTS, EMMETT A. "Reappraisal with Reference to Analysis of Reading Disabilities," *Educational Method*, XV (March, 1936), 305–7.
3. BOYKIN, ELEANOR. "Reading Gains in Pedagogical Importance," *Education*, LVIII (February, 1938), 350–52.
4. COLE, LUELLA. *The Improvement of Reading.* New York: Farrar & Rinehart, Inc., 1938.
5. DAVIDSON, HELEN P. "A Study of the Confusing Letters *B*, *D*, *P*, and *Q*," *Pedagogical Seminary*, XLVII (December, 1935), 458–67.
6. DICKSON, BELLE L. "Trends in the Teaching of Phonics," *California Journal of Elementary Education*, V (August, 1936), 51–58.
7. DOLCH, E. W. "A Basic Sight Vocabulary," *Elementary School Journal*, XXXVI (February, 1936), 456–60.
8. DOLCH, E. W. "The First Step in Remedial Reading," *Elementary School Journal*, XXXVII (December, 1936), 268–72.
9. DOLCH, E. W. "Phonics and Polysyllables," *Elementary English Review*, XV (April, 1938), 120–24.
10. DOLCH, E. W., and BLOOMSTER, MAURINE. "Phonic Readiness," *Elementary School Journal*, XXXVIII (November, 1937), 201–5.
11. DONNELLY, HELEN E. "The Growth of Word Recognition Skills in Grade One," *Education*, LVI (September, 1935), 40–43.
12. DURRELL, DONALD D. "A Vocabulary for Corrective Reading," *Elementary English Review*, XI (April, 1934), 106–9.
13. DURRELL, DONALD D., and SULLIVAN, HELEN BLAIR. "Vocabulary Instruction in the Intermediate Grades," *Elementary English Review*, XV (May, 1938), 185–98.
14. FLORIDA STATE CURRICULUM REVISION. "Skills for Beginning Readers," *American Childhood*, XXII (October, 1936), 47–48.
15. FREEMAN, FRANK N., GRAY, WILLIAM S., and BREED, FREDERICK S. "Summaries of Current Practices in the Teaching of Handwriting, Phonics, and Spelling," *Childhood Education*, XII (January, 1936), 173–77.
16. GARRISON S. C., and HEARD, MINNIE TAYLOR. "An Experimental Study of the Value of Phonetics," *Peabody Journal of Education*, IX (July, 1931), 9–14.
17. GATES, ARTHUR I. *The Improvement of Reading.* New York: Macmillan Co., 1935 (revised).
18. GATES, ARTHUR I., HUBER, MIRIAM BLANTON, and AYER, JEAN Y. *The Work-Play Books:* Second Grade Manual. New York: Macmillan Co., 1930.

19. GRAY, WILLIAM S., and LIEK, EDNA B. *Teacher's Guidebook for the Elson Basic Readers*, Book II. Chicago: Scott, Foresman & Co., 1931.

20. HOLMES, ELEANOR. "Vocabulary Instruction and Reading," *Elementary English Review*, XI (April, 1934), 103–5, 110.

21. REED, MARY D. "Developing Word Mastery Skills," *Education*, LVI (September, 1935), 25–29.

22. ROSEBROOK, WILDA. "Preventing Reading Deficiency," *Elementary School Journal*, XXXVI (December, 1935), 276–80.

23. STEVENS, MARION PAINE. "Phonetics. What and How?" *American Childhood*, XXI (March, 1936), 19–20, 56.

24. STONE, CLARENCE R. *Better Primary Reading*. St. Louis, Missouri: Webster Publishing Co., 1936.

25. STONE, CLARENCE R. "The Second-Grade Reading Vocabulary," *Elementary School Journal*, XXXV (January, 1935), 359–67.

26. TATE, HARRY L. "The Influence of Phonics on Silent Reading in Grade I," *Elementary School Journal*, XXXVII (June, 1937), 752–63.

27. *The Teaching of Reading: A Second Report*. Thirty-sixth Yearbook of the National Society for the Study of Education, Part I. Bloomington, Illinois: Public School Publishing Co., 1937.

28. VOGEL, MABEL; JAYCOX, EMMA; and WASHBURNE, CARLETON W. "A Basic List of Phonics for Grades I and II," *Elementary School Journal*, XXIII (February, 1923), 436–43.

29. WILSON, FRANK T.; FLEMMING, CECILE WHITE; BURKE, AGNES; and GARRISON, CHARLOTTE G. "Reading Progress in Kindergarten and Primary Grades," *Elementary School Journal*, XXXVIII (February, 1938), 442–49.

30. WITTY, PAUL, and KOPEL, DAVID. "The Place of Phonetics in a Reading Program," *Educational Administration and Supervision*, XXIII (May, 1937), 321–34.

ORAL-RECITATION PROBLEMS OF STUTTERERS

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*

THE study reported in this article was carried out in order to determine the methods used by teachers in handling stutterers in the oral-recitation situation and to determine the effect of these methods on the stutterers. The study was prompted by the need for more definite knowledge than was available concerning the techniques that should be used by teachers in handling stutterers in the classroom.

SUBJECTS AND PROCEDURE

Seventy-two stutterers and fifty teachers served as subjects for this survey. The stutterers included sixty boys and twelve girls, thirty-six of whom were pupils in the public schools of South Bend, Indiana. The remaining stutterers included ten from the Speech Clinic at the State University of Iowa, nine from Purdue University, and seventeen from the public schools in East Chicago, Indiana. The fifty teachers from Grade I through senior high school were chosen from among teachers who had had stutterers in their classes. Information was secured from the stutterers by means of personal interviews, supplemented by a questionnaire. A second questionnaire was used to secure information from the teachers.

REACTIONS OF TEACHERS

A survey of the teachers' responses shows that the most common reactions of teachers toward stutterers are sympathy and pity. Forty of the fifty teachers considered that therapeutic treatment of stuttering was definitely beyond their ability. Thirty-two methods were used by the fifty teachers in handling stutterers in the classroom. The large number of methods indicates that, as a rule, teachers are not particularly definite nor particularly consistent in their policies regarding stuttering pupils. Nineteen different methods

were advocated by different teachers as the most effective. The largest number of teachers maintained that building up confidence and making the stutterer feel at ease are the most effective methods. It should be pointed out, however, that these are really not methods, but aims.

The sixteen causes reported for stuttering indicate a wide variance of opinion among teachers on this subject. The largest group of teachers, comprising 50 per cent, believed that stuttering is caused by some form of "nervousness." Among other reasons given were lack of confidence, habit, imitation, lack of control of throat muscles, and malformation of the speech organs. Since a teacher is inclined to treat a stuttering case according to his idea of the cause, one can see the serious results that might ensue through a lack of knowledge on this subject.

REACTIONS OF STUTTERERS

The responses made by the seventy-two stutterers concerning methods used by their teachers in connection with oral recitation show that twenty-nine of these stutterers made use of written work to compensate for their shortcomings in oral recitation, while forty-three did no extra written work. Sixty-two felt that their oral recitations were not so creditable as their intellectual ability would warrant. Approximately 50 per cent admitted having given the wrong answer or having said, "I don't know," in order to avoid the speaking situation. Thirty-one, or almost 50 per cent, reported having been retarded in school because of their stuttering, but only eleven of these believed that their teachers were responsible for their retardation.

Only six stutterers felt that they should be excused from oral recitations entirely. The remaining sixty-six believed that some oral work was advisable, since it tended to give them more control over the speaking situation and made them feel less inferior. The majority, however, felt that some consideration should be shown them and that they should be excused from recitations which were too long or too difficult to undertake. *Most of them thought that the most satisfactory policy would be to let them recite when they volunteer to do so.*

More than 50 per cent of the stutterers reported that none of the various methods used by the teachers was particularly helpful. A

kind, friendly, jolly disposition was the type of personality most of them considered essential in a teacher. Forty-three per cent replied that they had had teachers who did not know of their difficulty. Some of these were mild cases, and the more serious cases believed that they had concealed their handicap from their teachers by not reciting and by remaining much in the background. However that may be, the indications are that estimates of the incidence of stuttering, when based on teachers' judgments, are probably inaccurate.

The following quotations are taken from the questionnaire responses of various stutterers in this study and are given as representative of the group reactions. They furnish further insight into the problems of stutterers in the classroom.

I remember two teachers who were far from being just, mostly, I believe, because they were so impatient. The first teacher that I remember as being impatient was the fifth-grade teacher who was generally feared about the school because she was too exacting and intolerant. She acted toward my stuttering as though I were generally incompetent and slow.

A teacher that was given to constant sarcasm and cutting remarks made it twice as hard for me. I felt that every time I would make a recitation she would be likely to make some cutting remark if the answer was wrong, so rather than take a chance on such criticism I would say as little as possible in her class. One of the greatest drawbacks is a teacher who is always trying to help by supplying the answer before you can say it, if you start to stutter or hesitate. They mean well, but many times I have wondered why they ask me in the first place if they are going to give the answer as soon as I stand up.

Only one teacher made me feel inferior to the class and after that I felt that way in every class. That was the teacher who forced me to give an oral report in geography. The report was well written, but a flop orally and I felt it a long time after. A few teachers forced me to recite, but I avoided this by playing dumb.

I found that I could get along much better with a teacher who had patience and would give me more time to answer questions than one who made me sit down because she couldn't waste time.

If a teacher seems interested in what you are saying, that helps more than anything else. If her attitude is indifferent, I would never bother saying any more than I had to at any time and would never recite unless called upon.

One teacher took a great burden off my mind by treating me as a normal person.

I remember one teacher that called on someone else when I was trying to recite. This upset me to a great extent and gave me the further impression that my stuttering was not only a burden to myself but also a burden to other people.

I have mentioned but a few of the outstanding incidents which illustrate the intimate relationship existing between a stutterer's school life and his stuttering. Many more could be listed if I could remember them. At any rate, I hope that these few will impress upon the teachers the responsible position which they hold being where they can adjust the stutterer to his stuttering. Innumerable moments of misery could be turned into moments of happiness did but one teacher know how to treat properly one stutterer.

CONCLUSIONS AND RECOMMENDATIONS

It would appear that to a significant degree the attitudes of stutterers toward school and education generally are determined by their experiences in oral recitation. On the whole, these experiences are not conducive to attitudes that facilitate learning. Moreover, the experiences of stutterers in connection with oral recitations appear frequently to be more detrimental than beneficial so far as general personality development and speech development are concerned.

These facts constitute problems for the school staff and particularly for the classroom teacher, since it is he who most directly determines the nature of the experience which the stutterer undergoes in oral recitation.

The findings of this study indicate that a large majority of the classroom teachers interviewed consider themselves inadequately trained for meeting these somewhat unusual and subtle problems. This inadequacy is felt with regard both to their knowledge of stuttering and to their knowledge of principles of dealing with the adjustment problems occasioned by stuttering. The stuttering pupils also express the belief that teachers' methods and policies are often unsatisfactory and frequently unwise. This finding implies that, insofar as stuttering resembles other behavioristic deviations found among school children, classroom teachers, as represented by those interviewed in this study, have not had adequate opportunity to become trained in handling classroom problems associated with such deviations. It is reasonable to recommend a re-evaluation of current

teacher-training facilities and policies with respect to the problems considered in this study.

Certain positive recommendations may be made, at least tentatively, on the basis of the present study: (1) Some type of special consideration should be given the stuttering pupil in the matter of oral recitation. Probably the most desirable plan is to call on the stutterer to recite only when he volunteers to do so. (2) The stutterer should not be hurried. He should not be interrupted in his efforts at speaking, nor should an attempt be made to say the words for him. Irritation, indifference, or an expression of boredom on the part of the teacher creates a decidedly unfavorable reaction in the stutterer. (3) A friendly atmosphere should be created by the other members of the class in order that the stutterer may not feel excluded from, nor inferior to, the rest of the group. (4) It is usually desirable to demand extra written work from the stutterer to the extent that he is excused from oral recitation. (5) It is especially desirable to develop a sincere, friendly interest in the stuttering pupil, to gain his point of view, and to establish his confidence through personal conferences concerning his problems and means of meeting them. (6) It is desirable to prepare the stutterer emotionally and intellectually to meet as many speech situations as possible. He should in no case, however, be forced into such situations. Rather, the instructor should strive to create a desire in the stutterer to take part in oral recitations.

It is not to be expected that the classroom teacher know how to treat stuttering clinically, but the teacher should know how to train the stuttering pupil to develop such attitudes toward himself and his disorder as will facilitate his scholastic progress and general personality development. In a word, if the teacher cannot cure stuttering (and it is not reasonable to expect him to cure it), his job becomes that of teaching the child to live with his stuttering as gracefully and as efficiently as possible.

PREDICTING FIRST-GRADE READING ACHIEVEMENT

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PROBLEMS OF THE INVESTIGATION

THE purposes of the study reported in this article were to determine some of the causes of failure of first-grade entrants in the Billings public schools and, if possible, to set up formulas for predicting success in advance of instruction. The specific problems involved were: (1) What is the influence of vision on achievement in reading in Grade I? (2) Can reading achievement of first-grade entrants be predicted on the basis of mental-test scores? (3) To what extent can tests of reading readiness be depended on to point out the probable successes and failures in beginning reading?

SUBJECTS AND TESTS USED

The subjects for this study were the pupils of five first-grade rooms in the Billings public schools. The subjects were selected in such a way as to give as accurate a sampling as possible of all first-grade children in the system. The teachers in the rooms where the experiment was being carried out were experienced first-grade teachers with excellent teaching reputations.

Monroe's Reading Aptitude Tests for Prediction and Analysis of Reading Abilities and Disabilities and the Metropolitan Readiness Tests were administered to all first-grade entrants in the five selected rooms during the first week of the 1936–37 school term. These tests were administered by the classroom teachers of the respective rooms, who were assisted by student-teachers from the Eastern Montana State Normal School. All teachers and student assistants were first given careful instruction in the methods of conducting the examinations, and they were directed to follow in detail the instructions set up by the authors of the tests. The mental ages of the children were obtained on the Stanford Revision of the Binet-

Simon Intelligence Scale by H. C. Hines, head of the psychology department of the Eastern Montana State Normal School, and his corps of trained examiners. For determining the reading progress of the pupils, the Metropolitan Achievement Test, Grade I, Form A, was given to all pupils at the end of six months of instruction. This test was given by C. C. Shively, director of testing for the Billings schools. The vision of first-grade entrants was tested by means of the Keystone telebinocular in the hands of trained workers from the Normal School who were employed by the National Youth Administration under the direction of the writer.

The influence of vision on reading achievement was determined by computing the correlation between reading achievement, as measured by the Metropolitan Achievement Test, and the presence or the absence of visual defects, as measured by the telebinocular.

The value of measures of reading readiness in predicting reading achievement was determined by correlating the scores on the Metropolitan Achievement Test with the results obtained from the Monroe Reading Aptitude Tests and the Metropolitan Readiness Tests. Inasmuch as some of these tests, notably the Metropolitan Readiness Tests and the Metropolitan Achievement Test, measured some arithmetical ability as well as reading ability, it was found necessary to separate these items and to use partial as well as total scores in making computations.

The relation of mental age to reading achievement was found by correlating the Stanford-Binet mental age for each child with his score on the Metropolitan Achievement Test.

RELATION OF READING ACHIEVEMENT AND RESULTS ON TESTS OF VISION

The results of this study, as shown in Table 1, and of other studies that have dealt with the vision of first-grade children, particularly as measured by the telebinocular, warrant the following conclusions:

1. From 10 to 22 per cent of these first-grade entrants had defective visual acuity, as indicated by the results on Test 3.

2. Visual-fusion difficulties (Tests 2 and 7) were encountered by approximately a fifth of all first-grade pupils. Depth perception, another factor in proper eye co-ordination (Test 5), was lacking in 21

per cent of the pupils examined in this study and in as many as 38 per cent of the children examined in other studies.

3. Muscular imbalance of the eyes was found to be more prevalent in the case of lateral imbalance (Test 6) than in the case of vertical imbalance (Test 4), the percentages being 12 and 0.9, respectively. These percentages compare rather closely with those of other studies.

TABLE 1

ERRORS IN VISION OF 116 FIRST-GRADE ENTRANTS IN FIVE SCHOOLS IN BILLINGS, AS REVEALED BY KEYSTONE TELEBINOCULAR

Test	Pupils with Defects	
	Number	Per Cent
1	.....	.....
2	23	19.8
3a	26	22.4
3b	11	9.5
3c	12	10.3
4	1	0.9
5	24	20.7
6	14	12.1
7	27	23.3
8	15	12.9
Pupils making errors on one or more tests	66	56.9

4. Common errors of focus (Test 8) which interfere with efficient vision were found in 13 per cent of the children examined in this study. Other studies, however, show percentages as high as 37.

5. When the results of the visual tests were compared with the reading achievements of these first-grade pupils, little relation was found. Correlations between failures on each of these tests and reading achievement were negative for most cases. Visual acuity was, however, an exception to the rule. In this case the biserial coefficient of correlation was found to be $.31 \pm .08$. Other studies reviewed report an almost total lack of relation between reading achievement and results on telebinocular tests.

Lack of visual efficiency may be a serious drawback to children in their school work. Nervous instability, restlessness, headaches, or

other results of visual deficiency may seriously hamper school progress in one way or another, but, according to the present evidence, such defects, on the whole, do not impair reading efficiency at the first-grade level to the extent that prediction of success or failure can be based on the absence or the presence of such defects.

RELATION OF READING ACHIEVEMENT AND MENTAL AGE

Many factors enter into the process of getting the child ready to read or in the maturation of the child to the point where reading is possible for him. Two of these factors, mental age and readiness test scores, were considered at this point in the study.

TABLE 2

CORRELATIONS BETWEEN MENTAL AGE AND READING ACHIEVEMENT OF FIRST-GRADE ENTRANTS IN FIVE INVESTIGATIONS

Study*	Mental Test Used	Number of Cases	Correlation with Reading Achievement
Morphett and Washburne (4)	Detroit First-Grade Intelligence	141	.59
Morphett and Washburne (4)	Stanford-Binet	141	.51
Harrison (2)	Stanford-Binet	120	.377
Deputy (1)	Pintner-Cunningham	103	.70
Present study	Stanford-Binet	116	.62

* The numbers in parentheses refer to the studies listed at the end of this article.

The data in Table 2, showing the results of a review of the studies dealing with the relation of mental age to reading achievement, seem to point to the same conclusion, namely, that mental age has a definite relation to success in reading in Grade I. While the correlations between these factors range from a low of .377 to a high of .70 it must be remembered that various criteria were used to measure reading achievement and that both individual and group tests were used to measure mental age. In the present study the correlation between the Stanford-Binet mental age and the Metropolitan Reading Achievement Test was found to be $.62 \pm .03$, which is similar to the results of the other studies reported in Table 2.

In Table 3 are shown the results of a comparison of the factors of mental age and reading progress in terms of the percentage of children in the present study doing average work. Here, as was the case in the study by Morphett and Washburne (4), marked success was not obtained until a mental age of six years and six months was reached. These results, then, seem to agree with, and consequently to validate, the other studies compared. It is extremely doubtful, therefore, whether children with mental ages of less than six years and six months should attempt the reading process unless they have other talents which might reasonably point to success.

TABLE 3

NUMBER OF CHILDREN AT EACH MENTAL-AGE LEVEL AND PERCENTAGE MAKING AVERAGE PROGRESS IN READING

Mental Age in Years and Months	Number of Children	Percentage Making Average Progress or Better*
5-0 to 5- 5	7	29
5-6 to 5-11	9	33
6-0 to 6- 5	28	29
6-6 to 6-11	24	58
7-0 to 7- 5	24	71
7-6 to 7-11	13	85
8-0 to 8- 5	6	100

* No percentages were figured for groups of less than six children.

RELATION OF READING ACHIEVEMENT AND SCORES ON READING-READINESS TESTS

Table 4 shows that in practically all the studies here compared, fairly high correlations have been found between readiness-test scores and reading achievement. In spite of the fact that different criteria were used to measure both reading readiness and reading achievement, the correlations between these two factors ranged between .41 and .66. In the present study the scores on the Metropolitan Readiness Tests correlated with reading achievement to the extent of $.59 \pm .03$, and the scores on the Monroe Reading Aptitude Tests correlated $.41 \pm .04$ with reading achievement.

PREDICTING SUCCESS OF BEGINNERS IN READING

The correlations between reading achievement and the five factors investigated in this study are given in Table 5. Positive correlations with reading achievement are shown in all cases. Three of the factors —the Metropolitan Readiness Test, the Monroe Reading Aptitude

TABLE 4

CORRELATIONS FOUND IN FIVE STUDIES BETWEEN READING ACHIEVEMENT AND SCORES ON READING-READINESS TESTS OF FIRST-GRADE ENTRANTS

Study*	Readiness Test Used	Number of Cases	Correlation with Reading Achievement
Lee, Clark, and Lee (3)	Lee-Clark Reading Readiness	164	.49
Harrison (2)	Metropolitan Readiness	120	.485
Wilson and Burke (5)	Metropolitan Readiness	25	.57
Deputy (1)	Tests devised by author	103	.66
Present study	Metropolitan Readiness	116	.59
Present study	Monroe Reading Aptitude	116	.41

* The numbers in parentheses refer to the studies listed at the end of this article.

TABLE 5

CORRELATIONS OF FIVE VARIABLES WITH READING ACHIEVEMENT FOR 116 FIRST-GRADE ENTRANTS IN FIVE SCHOOLS IN BILLINGS

Variable	Correlation
Chronological age	.12 ± .06
Mental age on Stanford-Binet test	.62 ± .03
Monroe Reading Aptitude Tests	.41 ± .04
Metropolitan Readiness Tests	.59 ± .03
Visual acuity	.31 ± .08

Tests, and mental age—were high enough to seem to have special significance as predictive instruments. Visual acuity, with a correlation of .31 and a probable error of .08, was less significant than the three criteria mentioned. This fact, together with the extremely low correlations obtained by other investigators between visual acuity and reading achievement, eliminates it from further consideration as a predictive instrument in this study. Chronological age, with a correlation of .12 ± .06, is also too low to have any weight as a predictive factor.

In this study the combination yielding the highest multiple correlation with reading achievement was the combination of mental age and scores on the Metropolitan Readiness Tests, which in Table 6 is shown to give a multiple correlation of .64±.037. The use of mental age and the other readiness test (Monroe Reading Aptitude Tests) gave a multiple correlation of .63±.038, while the use of the two readiness tests as predictive instruments gave a correlation of only .59±.04. When all three independent variables were used, the multiple coefficient thereby obtained was .64±.037.

TABLE 6

MULTIPLE AND PARTIAL CORRELATIONS BASED ON DATA OBTAINED FROM 116 FIRST-GRADE ENTRANTS IN THE BILLINGS PUBLIC SCHOOLS

Variables*	Correlation
Multiple correlations:	
$R_{1(23)}$	.64±.037
$R_{1(24)}$	.63±.038
$R_{1(34)}$	.59±.040
$R_{1(234)}$	.64±.037
Partial correlations:	
$r_{12.3}$	.32±.056
$r_{14.3}$	.01±.063
$r_{24.3}$	.07±.062
$r_{13.2}$	.22±.059
$r_{14.2}$	.15±.060
$r_{34.2}$	.54±.044
$r_{12.34}$	.32±.056
$r_{13.24}$	.17±.060
$r_{14.23}$	.20±.060

* 1 = reading achievement; 2 = mental age; 3 = scores on Metropolitan Readiness Tests; 4 = scores on Monroe Reading Aptitude Tests.

SUMMARY

Only a slightly increased correlation was obtained when either of the two readiness tests was combined with mental age. When all three of these variables were computed as a multiple coefficient of correlation with reading achievement, the result was but little greater than when mental age alone was used. Mental age, therefore, seems to be superior to score on reading-readiness tests as an instrument for predicting reading achievement of first-grade entrants.

The relation between good and poor vision of pupils and their success in learning to read in Grade I is extremely low and even negative in some cases.

The relation of mental age of first-grade pupils to their reading achievement is relatively high, the correlation between these two factors being $.62 \pm .03$. The mental age required to do average work in first-grade reading was found to be six years and six months or better. Below this age far more pupils failed than succeeded.

The relation of reading readiness, as measured by the Metropolitan Readiness Tests and the Monroe Reading Aptitude Tests, to reading achievement, while distinctly positive ($.59 \pm .03$ and $.41 \pm .04$), was lower than the correlation obtained when mental age was used as the criterion.

Other Studies

1. Deputy, Erby Chester. *Predicting First-Grade Reading Achievement*, pp. 30–31. Teachers College Contributions to Education, No. 426. New York: Teachers College, Columbia University, 1930.
2. Harrison, Virginia. "An Evaluation of Chronological Age, Mental Age, Kindergarten Training, and Socio-economic Status as Factors Underlying Reading Readiness. Unpublished Master's thesis, University of Tulsa, 1938.
3. Lee, Murray J., Clark, Willis W., and Lee, Dorris May. "Measuring Reading Readiness," *Elementary School Journal*, XXXIV (May, 1934), 656–66.
4. Morphett, Mabel Vogel, and Washburne, Carleton. "When Should Children Begin To Read?" *Elementary School Journal*, XXXI (March, 1931), 496–503.
5. Wilson, Frank T., and Burke, Agnes. "Reading Readiness in a Progressive School," *Teachers College Record*, XXXVIII (April, 1937), 565–80.

AGE OF PARENT AND INTELLIGENCE OF OFFSPRING

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*

THIS article reports a study of the relation between age of parent and intelligence of offspring made through an examination of the records of the Georgia State Womans College. Differences between age of parent and of daughter were determined, and ratings were secured on several tests given at entrance into college. The Psychological Examination of the American Council on Education was used to test general ability. In the autumn of 1937 the Cooperative Test Service tests in English, mathematics, social studies, and science were used. In the preceding years the tests used in these fields were prepared by the University System of Georgia. Tabulations were made according to migration of the family since the daughter's birth. Test ratings were tabulated according to whether the daughter was among the upper or the lower 50 per cent of the students taking a particular test.

Data for non-migrating families are presented in Table 1. These data show, with one exception, that the daughters ranking among the upper 50 per cent on each of the tests are more likely to have older parents than are the daughters in the lower 50 per cent. Conversely, the daughters in the lower 50 per cent on the tests are more likely to have young parents than are the daughters in the upper 50 per cent. Thus, on the American Council test 53.7 per cent of the daughters in the upper 50 per cent have fathers who are thirty or more years older than themselves, whereas only 42.2 per cent of those in the lower 50 per cent have fathers of comparable ages. Conversely, of the daughters in the lower half, 57.8 per cent have fathers who are not more than thirty years older than themselves, whereas of those in the upper half only 46.3 per cent have fathers this young. The same situation prevails when age of mother is considered in relation to age and rating of daughter. Thus, 50

per cent of the daughters who are in the upper half on the American Council test have mothers who are more than twenty-five years older than the daughters, whereas among daughters in the lower half, only 33.3 per cent have mothers who are this old.

TABLE 1

RELATION OF AGES OF PARENTS TO DAUGHTER'S COLLEGE-ENTRANCE RATINGS ON FIVE TESTS FOR FAMILIES WHO HAD NOT MIGRATED FROM COUNTY IN WHICH DAUGHTER WAS BORN

Daughter's Standing in Test	Percentage of Fathers Whose Ages Exceeded Those of Daughters—			Percentage of Mothers Whose Ages Exceeded Those of Daughters—		
	Number of Cases	By 30 Years or Less	By More than 30 Years	Number of Cases	By 25 Years or Less	By More than 25 Years
American Council Psychological:*						
Lower half	64	57.8	42.2	51	66.7	33.3
Upper half	54	46.3	53.7	66	50.0	50.0
English:†						
Lower half	41	51.2	48.8	39	53.8	46.2
Upper half	66	39.4	60.6	81	59.3	40.7
Mathematics:†						
Lower half	59	52.5	47.5	60	58.3	41.7
Upper half	48	33.3	66.7	54	55.6	44.4
Social studies:†						
Lower half	35	57.1	42.9	46	69.6	30.4
Upper half	67	40.3	59.7	72	51.4	48.6
Science:†						
Lower half	44	52.3	47.7	47	66.0	34.0
Upper half	57	36.8	63.2	67	52.2	47.8

* The test ratings are based on data for the Georgia State Womans College. Since incomplete data on ages reduced the number of cases included, the number in the upper and the lower halves are not necessarily regular.

† The test ratings are based on percentile rankings of the white schools in the University System of Georgia.

The other tests show the same general relation between test ratings and parent-daughter age differential, with the exception of the English test in the case of the mother-daughter age differential. This exception will be considered later.

Certain sociological factors may be important in the relation between parent-daughter age differential and test ratings. It is pos-

sible that, as non-migrating parents become older, they become more stabilized in their particular communities than are younger parents. Vocational or economic stability within a family should aid learning and adjustment, of the kind here measured, because economic security tends to reduce home frictions and interferences with learning. Moreover, economically secure homes may be better able to supply books and other learning materials than are other homes.

There is the further sociological possibility that older parents were older at the time of marriage than were younger parents; marriage may have been delayed so that more general or professional education could be secured before family responsibilities were assumed. If older parents have a better educational or professional background than younger parents, they would probably be better able to assist their daughters in academic achievement, through home attitude and guidance, than would younger parents.

Older parents would also be more likely than younger parents to have children older than the daughters studied. Older siblings might offer helpful guidance to younger children, in ways reflected in test scores.

Reference may be made to a biological possibility. Aging of parent may affect the germ plasm, the advantage in the test ratings of the daughters of older parents being thus explained. Although age of parent as influencing sex of offspring may be discarded, all possibility that parental age may influence germ plasm is not thereby precluded. In some insects, for example, Drosophila, crossing-over decreases as the individual grows older.[1] In some plants age of pollen or of seed affects rate of mutation.[2] The broad jump from insects or plants to human beings does not preclude learning about human inheritance through study of other species. Leaving open, however, the question of the effect of parental age on the learning rate of offspring, through the effect of age on the germ plasm, the

[1] Laurence H. Snyder, *The Principles of Heredity*, p. 161. Boston: D. C. Heath & Co., 1935.

[2] A. Franklin Shull, *Heredity*, p. 239. New York: McGraw-Hill Book Co., Inc., 1938 (third edition).

sociological explanation of the age differentials revealed in this article seems, at present, to be preferred.

The foregoing discussion does not explain the fact that the percentage (46.2) of the daughters in the lower half on the English test who were from older mothers is larger than the percentage (40.7) in the upper half on that test—the converse relationship, of course, pertains to daughters of younger mothers. It may be noted here that recent decades have witnessed great expansion in educational opportunity, especially for women, as well as expansion in the circulation of periodical literature which fosters the interests of women and the home.[1] It is conceivable that through these avenues younger mothers have secured a more thorough training and more extensive experience in the field of English than have older mothers, so far as maternal training and experience are such as might be reflected in test performances of daughters. For similar reasons of training and experience, one might expect less of such influence, according to age of mother, in the case of ratings on the other tests.

The data for the migrating families, which are given in Table 2, are not so consistent. On the mathematics and the science tests the relation of the parent-daughter age differential to the test ratings is the same as that in the case of non-migrating families—the percentage of daughters in the upper half who have older parents being more than the percentage in the lower half. The same relation appears between father's age and daughter's rating on the social studies and between mother's age and daughter's rating on the American Council Psychological Examination. In five instances among these migrating families, differences in the percentages of less than 0.5 appear: for all comparisons in English and for the mothers in social studies. Obviously these differences are of no significance. In the case of the father's age and daughter's rating on the American Council test, the situation is somewhat more anomalous. Here a distinctly smaller percentage of daughters in the upper than

[1] *a*) Harold H. Punke, "Periodical Literature in Adult Education," *Educational Administration and Supervision*, XX (March, 1934), 216–26.

b) Harold H. Punke, "Cultural Change and Changes in Popular Literature," *Social Forces*, XV (March, 1937), 359–70.

in the lower half have fathers in the older age group. No satisfactory explanation for this finding occurs to the writer.

TABLE 2

RELATION OF AGES OF PARENTS TO DAUGHTER'S COLLEGE-ENTRANCE RATINGS ON FIVE TESTS FOR FAMILIES WHO HAD MIGRATED FROM COUNTY IN WHICH DAUGHTER WAS BORN

Daughter's Standing in Test	Percentage of Fathers Whose Ages Exceeded Those of Daughters—			Percentage of Mothers Whose Ages Exceeded Those of Daughters—		
	Number of Cases	By 30 Years or Less	By More than 30 Years	Number of Cases	By 25 Years or Less	By More than 25 Years
American Council Psychological:*						
Lower half	34	52.9	47.1	28	64.3	35.7
Upper half	58	60.3	39.7	53	58.5	41.5
English:†						
Lower half	34	44.1	55.9	26	61.5	38.5
Upper half	45	44.4	55.6	55	61.8	38.2
Mathematics:†						
Lower half	40	50.0	50.0	44	68.2	31.8
Upper half	34	35.3	64.7	39	53.8	46.2
Social studies:†						
Lower half	25	48.0	52.0	26	61.5	38.5
Upper half	48	41.7	58.3	54	61.1	38.9
Science:†						
Lower half	32	46.9	53.1	31	67.7	32.3
Upper half	41	43.9	56.1	52	59.6	40.4

* The test ratings are based on data for the Georgia State Womans College. Since incomplete data on ages reduced the number of cases included, the number in the upper and the lower halves are not necessarily regular.

† The test ratings are based on percentile rankings of the white schools in the University System of Georgia.

A general comparison of the data for migrating and non-migrating families reveals among migrants certain irregularities and variations from the general pattern of parent-daughter age differential described for non-migrants. Movement and shifting of contacts, especially if frequent, might be expected to produce some disturbance. In a general way, however, the data for migrants substantiate those

for non-migrants—the daughters in the upper half on the test ratings come from parents in the older age groups to a larger extent than do daughters in the lower half on the test ratings.

Certain evaluative comments may be in order. The arbitrary age division between older and younger parents is unimportant for comparisons of the type herein made. Refinements in the tabulating of frequency and distance of migration might have been worth while had the records carried the necessary data. A study of parent test ratings or of family tensions might also have been enlightening if needed data had been available. The data are somewhat limited from the standpoint of number of cases but not from that of number of tests considered. Moreover, the data are rather consistent in their indications.

Accordingly, the study as it stands should be of value in determining the relation of age of parent to intelligence of offspring. So far as it goes, the study suggests that children of older parents tend to be more intelligent, as intelligence is here measured, than do children of younger parents. It seems that what difference there is in this respect can be better explained on sociological than on biological bases.

It is possible that different results might be secured from similar studies made in other parts of the country, where economic status of homes, educational opportunity, age at marriage, and possibly diet are different from those in the region here studied.

SELECTED REFERENCES ON KINDERGARTEN-PRIMARY EDUCATION

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*

THIS, the seventh annual bibliography of selected references in kindergarten-primary education, covers the period from January 1, 1938, to January 1, 1939. The basis of selection is the same as that used for the earlier lists.

GENERAL EDUCATIONAL ASPECTS[1]

185. DRISCOLL, GERTRUDE P. "Guidance at the Elementary Level," *Teachers College Record*, XL (October, 1938), 25–33.

Discusses the relation of personality development to factors of growth, the effect of early childhood experiences on later behavior, and the influence of emotion on thinking and motivation.

186. EDUCATIONAL POLICIES COMMISSION. *The Purposes of Education in American Democracy.* Washington: Educational Policies Commission of the National Education Association and the American Association of School Administrators, 1938. Pp. x+158.

Sets forth the view that the achievement of democracy is the foremost responsibility of the schools and states specific objectives for each of four major purposes: self-realization, the improvement of human relationships, economic efficiency, and civic responsibility.

187. "Fifty Years of Child Study," *Child Study* (Anniversary number), XVI (November, 1938), 34–80.

Contains historical material on the progress of child development and parental guidance from 1888 to 1938. Among the contributors to this issue are Arnold Gesell, Adolf Meyer, Bernard Glueck, and Sidonie Gruenberg.

188. LANE, ROBERT HILL. "Blueprint for the Lower School," *Progressive Education*, XV (October, 1938), 489–92.

Outlines a plan for unifying the school for the child from two to eight.

189. PULLIAS, E. V. "The Relationship between Education and Mental Hygiene," *Mental Hygiene*, XXII (October, 1938), 612–24.

[1] See also Item 332 (Clarke) in the list of selected references appearing in the June, 1938, number of the *Elementary School Journal;* Item 519 (Dewey) in the October, 1938, number; Item 39 (Lane) in the January, 1939, number; and Item 183 (Updegraff, Dawe, Fales, Stormes, and Oliver) in the March, 1939, number.

Discusses a program for promoting mental health in nursery school, kindergarten, and primary grades.

190. ROGERS, JAMES FREDERICK. "Developing Strong Bodies and Able Minds," *School Life*, XXIV (November, 1938), 48, 58.

Urges teachers to make a daily appraisal of pupils and to utilize available services for correction and prevention of physical and mental handicaps.

191. RYAN, W. CARSON. *Mental Health through Education.* New York: Commonwealth Fund, 1938. Pp. viii+316.

Appraises situation observed in clinics and schools throughout the country and indicates need of applying scientific findings in mental hygiene and development of young children.

192. SEGEL, DAVID. *Nature and Use of the Cumulative Record.* United States Office of Education Bulletin No. 3, 1938. Pp. vi+48.

Discusses place, current practices, suggestive procedures, and prognostic value of cumulative records.

193. WRIGHTSTONE, J. W.; RECHETNICK, JOSEPH; MCCALL, WILLIAM A.; and LOFTUS, JOHN J. "Measuring Intellectual and Dynamic Factors in Activity and Control Schools in New York City," *Teachers College Record*, XL (December, 1938), 237–44.

Deals with a comparison of the results obtained from activity and control schools on tests of achievement, intelligence, and dynamic factors. Other phases of this experiment appeared in the *Teachers College Record* for April and December, 1937, and February, 1938.

CURRICULUM, TEACHING PROCEDURES, AND MATERIALS[1]

194. "Autumn Books 1938," *Elementary English Review*, XV (October, 1938), 238–45.

Gives a classified and annotated bibliography of children's books published in 1938.

195. COLEMAN, SATIS N. *The Book of Bells.* New York: John Day Co., 1938. Pp. viii+178.

Presents, in a style similar to the author's earlier *The Drum Book* (New York: John Day Co., 1931), facts and stories about bells of modern and ancient times. Includes suggestions for making and using bells.

196. DELONG, VAUGHN R. "Primary Promotion by Reading Levels," *Elementary School Journal*, XXXVIII (May, 1938), 663–71.

Sets up six requirements for a primary reading plan, two of which are mastery of a basic vocabulary and elimination of failure.

[1] See also Items 432 (Betts), 433 (Boney), 434 (Cole), 446 (Hockett), 459 (Witty), and 460 (Witty) in the list of selected references appearing in the October, 1938, number of the *Elementary School Journal.*

197. DEPEW, OLLIE. *Children's Literature by Grades and Types*. Boston: Ginn & Co., 1938. Pp. xiv+706.

Presents an anthology arranged for each grade under such types as poems, folk tales, fables, and modern stories. One section of the book treats the topics: historical development of literature for children, types of traditional and modern literature, ephemeral versus classical material, and literature in the schools.

198. FREDERICK, O. I. "Pupil Interests and Needs as a Basis for Curriculum Development," *Curriculum Journal*, IX (November, 1938), 321–22.

Stresses the point of view that education is most effective when for its material it does not go outside the immediate sensory experiences of boys and girls.

199. GRAY, H. A., "Audio-visual Learning Aids for the Primary Grades," *Elementary School Journal*, XXXVIII (March, 1938), 509–17.

Discusses two questions: "What contributions can properly prepared sound-film materials make to the learning process at these grade levels?" "How may such teaching aids be utilized effectively?"

200. HEFFERNAN, HELEN. "New Emphases in Primary Curriculum," *California Journal of Elementary Education*, VII (August, 1938), 15–20.

Emphasizes possibilities in social and natural sciences and in creative expression for building backgrounds for teaching reading and arithmetic.

201. HOGAN, MARITA, and YESCHKO, MARGARET. "Latin American Countries in Children's Literature," *Elementary English Review*, XV (October and November, 1938), 225–32, 270–74.

Gives annotated bibliography of twenty-one stories dealing with Mexico, Central America, and South America, which can be used in the primary grades.

202. *Inexpensive Books for Boys and Girls*. Compiled by the Book Evaluation Committee of the Section for Library Work with Children. Chicago: American Library Association, 1938 (second edition). Pp. 44.

Compiled for libraries and schools with limited funds. Groups books under "Picture Books and Easy Reading" and "Junior Books of General Interest." In separate section, charts "Analysis of Publishers Series" and information on format, appearance, appeal to children, print, paper, illustrations, margins, binding, and selection of titles.

203. KEENER, EDWARD E. "Teaching Primary Reading by the Non-oral Method," *Elementary English Review*, XV (December, 1938), 291–92, 308.

Presents a method of teaching reading as a "see and comprehend" process.

204. MASON, BERNARD S. *Drums, Tomtoms, and Rattles*. New York: A. S. Barnes & Co., 1938. Pp. 206.

Presents a detailed history of primitive percussion instruments, with suggestions for use in children's rhythm bands. Illustrations are included.

205. MATHIS, DOROTHY M. "Some Ten Cent Books Suitable for Primary Grades," *Elementary English Review*, XV (October, 1938), 233–35.

Selects forty-five books on a check list of criteria, including format, illustrations, content, child interest, and vocabulary load.

206. MILLIGAN, DAVID FREDERICK. *Fist Puppetry*. New York: A. S. Barnes & Co., 1938. Pp. xiv+130.

Regards puppetry as a logical introduction to drama for children. Explains how to make fist puppets and theaters and how to adapt and produce plays.

207. *Newbery and Caldecott Awards*. Chicago: American Library Association, 1938.

A leaflet describing the books that have received the Newbery and the Caldecott awards for outstanding books for children.

208. STEWART, ELLEN MCCARTER. "Speech Training for Small Children," *American Childhood*, XXIII (June, 1938), 60–61.

Discusses specific speech difficulties and procedures for correction.

209. WILLS, ANNIE R. "An Investigation of Relationship between Rate and Quality of Handwriting in the Primary School," *British Journal of Educational Psychology*, VIII (November, 1938), 229–36.

Studies speed and quality of handwriting at various levels in elementary school.

210. WITTY, PAUL, and KOPEL, DAVID. "The Interest Inventory in Directing Children's Reading," *Education*, LIX (September, 1938), 11–16.

Describes a study of children's interests and needs and gives an interest inventory as a teaching aid for remedial reading.

211. WULFING, GRETCHEN. "We Study Our Primary Program," *Childhood Education*, XV (September, 1938), 14–19.

Describes a four-point plan for improving the primary-grade program developed at San Jose, California.

INVESTIGATIONS AND EXPERIMENTAL STUDIES[1]

212. CHRISTIANSON, HELEN. *Bodily Rhythmic Movements of Young Children in Relation to Rhythm in Music*. Teachers College Contributions to Education, No. 736. New York: Teachers College, Columbia University, 1938. Pp. x+196.

Presents in a doctoral dissertation (1) a technique for observing children's behavior patterns during situations involving music, (2) a rating scale for responsiveness to rhythmic music, and (3) a basis for selection and evaluation of rhythmic music according to suitability for use with young children.

[1] See also Item 154 (Moore), Item 168 (Stoddard), and the study by M. Mantor, "An Objective Method for Recording Three- and Four-year-old Children's Enjoyment of Stories, Particularly Applied to a Study of Fanciful and Realistic Stories," in Item 169 in the list of selected references appearing in the March, 1939, number of the *Elementary School Journal*.

213. DAWSON, MILDRED A. "Elementary School Language Textbooks," *Elementary English Review*, XV (November and December, 1938), 275–84, 309–17; ———, XVI (January, 1939), 31–38.

Reports analytical studies of forty-five elementary language textbooks. (A continuation of the study reported in Item 469 in the October, 1938, number of the *Elementary School Journal*.)

214. FENDRICK, PAUL, and MCGLADE, CHARLES A. "A Validation of Two Prognostic Tests of Reading Aptitude," *Elementary School Journal*, XXXIX (November, 1938), 187–94.

"Based on one year of reading achievement, as measured by the Gates Primary Reading Test, an attempt was made to validate the prognostic value of the Detroit First-Grade Intelligence Test and the Metropolitan Readiness Tests."

215. GATES, ARTHUR I., and RUSSELL, DAVID H. "Types of Materials, Vocabulary Burden, Word Analysis, and Other Factors in Beginning Reading," *Elementary School Journal*, XXXIX (September and October, 1938), 27–35, 119–28.

Investigates effects of several factors on acquisition of reading ability.

216. GRANT, ALBERT. "The Comparative Validity of the Metropolitan Readiness Tests and the Pintner-Cunningham Primary Mental Test," *Elementary School Journal*, XXXVIII (April, 1938), 599–605.

Compares ratings of first-grade pupils on Metropolitan Readiness Tests with their scores made two years later on standard reading tests. Correlates reading-test scores with ratings on Pintner-Cunningham test to determine predictive value of the latter and of the Metropolitan Readiness Tests.

217. GRANT, ALBERT. "An Analysis of the Number Knowledge of First-Grade Pupils According to Levels of Intelligence," *Journal of Experimental Education*, VII (September, 1938), 63–66.

Analyzes, according to levels of intelligence, the responses of 563 beginning first-grade pupils to a test of number knowledge.

218. HILDEN, A. H. "Training Kindergarten Teachers To Test Their Pupils on the Stanford-Binet Scale," *School and Society*, XLVIII (July 23, 1938), 123–24.

Describes a plan whereby three thousand kindergarten pupils were tested. The program consisted in training kindergarten teachers to give the tests, checking accuracy of scores, and determining reliability by having a psychologist retest a sampling of each teacher's group.

219. HILDRETH, GERTRUDE, and AXELSON, ALFHILD J. "Improved Visual Acuity Tests for Young Children," *Teachers College Record*, XL (December, 1938), 229–36.

Presents an adaptation of the Snellen E visual-acuity chart designed to sift out children needing more intensive examination.

220. HOCKETT, JOHN A. "The Vocabularies of Recent Primers and First Readers," *Elementary School Journal*, XXXIX (October, 1938), 112–15.

Presents a vocabulary analysis of six first readers and six primers published since 1935.

221. MEIGHEN, MARY, and BARTH, ETHEL. "Geographic Material in Third-Grade Readers," *Elementary English Review*, XV (December, 1938), 299–301.

Analyzes geographic references in twenty third-grade readers.

222. MILLER, WILLIAM A. "What Children See in Pictures," *Elementary School Journal*, XXXIX (December, 1938), 280–88.

Investigates a number of items that third-grade children saw in six pictures without the aid of suggestion or guidance.

223. POMEROY, JULIA E. "The Relation of Reaction Time of Five-year-old Children to Various Factors," *Child Development*, IX (September, 1938), 281–83.

Studies speed of reaction to an auditory stimulus of one hundred kindergarten children five and a half years old. Analyzes data in relation to sex, occupational status of parents, intelligence, reaction time of adults on a similar test, introversion or extroversion, and physical well-being.

224. RUDISILL, MABEL. "Selection of Preprimers and Primers—A Vocabulary Analysis," *Elementary School Journal*, XXXVIII (May and June, 1938), 683–94, 767–75.

Analyzes vocabularies of preprimers and primers and concludes that the sequence in which these books are introduced to the beginner is a significant function of his progress in beginning reading.

225. RUST, METTA MAUND. "Tests and Studies of Infants and Young Children," *Review of Educational Research*, VIII (June, 1938), 229–40.

Reviews the literature for 1935–38 dealing with the study and the measurement of children under six. Includes psychological scales; motor, mental, and personality development; and methods of observation and recording.

226. SHIRLEY, MARY. "Common Content in Speech of Preschool Children," *Child Development*, IX (December, 1938), 333–46.

Analyzes "verbal responses of preschool children who are not subjected to the common environment of a nursery school."

227. SIMS, RUTH L. "Concept Analysis of Primers and Preprimers," *Elementary English Review*, XV (December, 1938), 302–5.

Analyzes thirteen primers and preprimers to determine whether the concepts presented are familiar to the average child.

228. WOLF, THETA HOLMES. *The Effect of Praise and Competition on the Persisting Behavior of Kindergarten Children.* Institute of Child Welfare Monograph No. 15. Minneapolis, Minnesota: University of Minnesota Press, 1938. Pp. 138.

Studies factors both in the situation and in child personality that influence persisting behavior.

Educational Writings

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REVIEWS AND BOOK NOTES

EVALUATING NEW SCHOOL PRACTICES.—This study[1] of "the problem of appraisal of newer educational practices" in elementary schools was begun in 1932, at the time the author became a member of the staff of the Institute of School Experimentation of Teachers College, Columbia University. A report of the results obtained from the first two years of study was published in 1935 in a monograph of Teachers College (*Appraisal of Newer Practices in Selected Public Schools*). In the present volume the original data "have been supplemented by more inclusive descriptions of practices and the evaluation of a larger range of educational objectives" (p. iii).

The survey of trends in experimental and conventional elementary schools, which is reported in the first 150 pages of the volume, should be helpful to persons who have had only limited contact with the development of elementary-school practices in recent years. The survey is, however, of necessity too brief to permit anything like a thorough review of these practices.

To the writer it seems that the author has taken an unwarrantedly optimistic view toward recent progress at the elementary-school level. He makes no note of the fact that there are many persons who believe that advance in elementary-school practices has slowed up significantly in recent years and that the time is now ripe for the launching of a new program of experimentation. Since, however, the major purpose of the volume is to report on the use made of new appraisal techniques, it would not be proper to press further this point.

The inclusive plan for appraising the outcomes of newer practices in elementary schools is ably set forth in chapter viii. In brief, the author's thesis is that an adequate plan of appraisal must include the gathering of valid and reliable evidence on most or, if possible, all of the major objectives of instructional practices. The statement of this appraisal technique and the report of its application represent the major contribution of the volume.

The concluding six chapters (excluding the final summary chapter) report the findings obtained through various instruments of appraisal for evaluating the work of equated pupils in "experimental and conventional schools." Unfortunately the author does not report how he gathered evidence to show that certain schools were experimental and others were conventional. Such distinctions are often made on a superficial basis. Be that as it may, however, the re-

[1] J. Wayne Wrightstone, *Appraisal of Newer Elementary School Practices*. New York: Teachers College, Columbia University, 1938. Pp. xiv+222. $2.25.

sults of the study show a surprising and heartening consistency of superiority for the "experimental" schools in those objectives which the author considers fundamental to improved practices in elementary schools. These objectives include the understanding and practicing of social relationships, the expressing of creative abilities, the engaging in leisure-time activities, and the mastering of those knowledges and skills that are the essential tools of the educated person.

In summary, this study provides (1) a valuable review of recent developments in the practices of elementary schools, (2) much information that can be used to refute the charges of the critics that these practices result in inferior work, and (3) an outline of new evaluation techniques that should be beneficial in the further development of new practices in elementary schools.

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A ROAD FOR THE EDUCATIONAL LIBERAL.—It would be needless elaboration of the obvious to dwell on the fact that educational problems are indissolubly tied up with political and economic problems and that all belong in the field of the social. It seems almost as obvious that the political and the economic problems of social life are quite clearly distinguishable from each other and from educational problems—but only in regions near the social surface. Fundamentally, all three types of problems have a common origin in a deeper perplexity, one that has been vexing thinkers for more than two thousand years—the relation between the individual and the group. It is the question of individual interest versus social interest. How can the values of individual freedom and initiative be reconciled with the values of authority and social control? Should production be left to individual enterprise or be controlled by the state? Should our army be raised by appeal for volunteers or by resort to conscription? Should the school curriculum be based on the interests of children or on the demands of society? A totalitarian government, whether the dictator obtains his scepter from the "haves" or from the "have-nots" of the population, magnifies the power of the state. Only the democracies continue loyal to individual values and still believe in preserving them. And, whether we will it or not, as goes the state, so goes the school.

A little book[1] which has recently appeared accepts the position outlined above and wrestles manfully with the problem of so organizing education that both individual and social values may be optimally achieved. It is essentially the Doctor's dissertation of Paul H. Sheats at Yale University. Ordinarily no extensive notice nor protracted discussion of a Doctor's thesis would seem called for, even though it emanates from Yale. In this instance, however, an ordinary task has been performed extraordinarily well.

The author devotes most of his attention to the recent literature of a politico-

[1] Paul H. Sheats, *Education and the Quest for a Middle Way.* New York: Macmillan Co., 1938. Pp. x+190. $1.25.

economic nature, to the discussions of controversial issues and conflicting ideologies that have been so numerous since the economic debacle in 1929. He draws from a wide range of sources and liberally intersperses his discussion with excerpts therefrom. In fact, quotations are at times so freely employed as to give the impression of a skilful ordering of the thoughts of others rather than an orderly expression of the author's thought.

For the educator who desires to take the middle of the road, the author offers a program that may be briefly described. He advocates genuine equalization of educational opportunity and the devotion of more attention to the development of intelligence. The latter is indispensable as a means of adjustment to social change. Intelligence can be properly trained, not by imparting fixed dogmas, but by improving methods of thinking. Social conditions and the cultural tradition should be studied realistically, with tolerance and open-mindedness—in other words, with a scientific attitude. The author's conception of education "holds freedom in high esteem but does not deny the importance of discipline and control, order, stability, and authority" (p. 185). As this statement would indicate, he acknowledges the importance of both individual and social values. He anticipates the achievement of no permanent balance between individual and social interests but believes in a program of continuous experimentalism.

The book makes no pretense of probing beneath politico-economic situations into the psychological and the philosophical phases of the central problem. For example, no attempt is made to clarify the term "intelligence," to define a problematic situation, to analyze the conception of integrated personality, or even to determine the fundamental nature of truth and tradition in human experience. It is the reviewer's belief that assumptions regarding the nature of personality and the knowledge process are closer to the foundation of our thinking than politico-economic considerations and should be weighed, along with the latter, before any attempt is made to frame a comprehensive social theory, including a theory or a philosophy of education.

FREDERICK S. BREED

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A NEW SYNTHESIS OF THE HISTORY OF AMERICAN EDUCATION.—Several textbooks now available present somewhat different but perhaps equally valid interpretations of the history of American education. The theme of a recent treatment[1] is that the history of American education is the story of the accommodation of "the growing social organism which is America" to the changing environment. The relatively simple society of the early Colonial period was educated through family life, community membership, the church, the handicrafts, and numerous other agencies, as well as through the schools, which were few in number and poor in offerings. "With the advance of civilization, each

[1] Stuart G. Noble, *A History of American Education.* New York: Farrar & Rinehart, Inc., 1938. Pp. xvi+440. $2.50.

of these agencies has, step by step, surrendered its educative functions to the schools. . . . . The process of institutionalization, overcoming all impediments, has moved steadily forward" (p. xv). The history of this movement furnishes the thread of the narrative in Noble's book.

Consistency required that the author construe the term "education" to mean a process of social and individual development conditioned by environmental forces both within and without the school. As in the case of the individual, the education of a people is conditioned by two factors: (1) the capacity for improvement and (2) the environment. The first leads to an inquiry of the educability of the people and involves a consideration of racial strains and social heritage. The second leads to a consideration of environmental forces, "such as the frontier, changing social and economic conditions, and philosophical points of view represented in religion, the Enlightenment, the romantic movement, and modern realism" (p. vii).

The chapters dealing primarily with the environmental influences constitute the most significant contribution of the work. These chapters are interspersed throughout the volume in such a manner as to provide background for chapters dealing with educational institutions of corresponding periods. Thus, "The Heritage of English Culture (1607–1700)" provides a setting for "The Religious Motive in Education (1607–1700)"; "The 'Age of Enlightenment' in Colonial America (1700–1775)" sets the stage for "The Transition to Formal Culture and Practical Utility in Education (1700–1775)." A chapter on "The Romantic Era (1825–1860)" provides background for chapters dealing with the crusade for common schools, the rise of native institutions, the advent of new method, the curriculum, and the education of women. Another chapter, "The Drift into Modern Realism (1870–1935)," serves as background for sections on the more recent developments in the field of education.

The organization of materials is original. The chapters dealing with environmental changes may be read as a unit, as may those that deal primarily with educational development. The chronological arrangement, although not rigidly adhered to, is followed within sensible limits. The author has succeeded in telling a connected and meaningful story.

A commendable and, for the most part, a successful attempt to write clearly and simply has led, in several instances, to oversimplification and to less qualifying of certain statements than seems desirable. The complete accuracy of a number of statements may be questioned. The only serious typographical error noted changed the date of the famous Connecticut school law from 1650 to 1630.

On the whole, the book is well written; the material has been judiciously selected and much of it is fresh; the organization is a teachable one; and the interpretation is based on familiarity with the facts and an understanding of educational problems. The book may be read with profit by laymen and educators and may well serve as a textbook in teacher-training courses.

HERMAN G. RICHEY

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BETTER LEARNING IN BETTER PROGRAMS.—Two specialists have recently made an outstanding addition[1] to the rapidly increasing number of accounts of vitalized school work. As such it has a worthy place among the successors to the pioneer contribution in this field in the yearbooks issued by the faculty of Francis W. Parker School (Chicago) under the leadership of Flora J. Cooke, principal. These records of successful school practice are sounding the final knell to the pernicious custom of training pupils to "speak pieces" and "sing songs" for the purpose of putting on a show. They afford ample evidence that regular and worth-while school work can be, and should be, sufficiently interesting so that phases of day-by-day learning can be utilized for programs. Supervisors and teachers will find in *Creative Ways for Children's Programs* a wealth of experience in utilizing subject matter as means of interpreting special days and other normal interests of children.

The book includes a foreword, eight chapters, and a portfolio of pictures. Fannie W. Dunn states the philosophy of the book in the Foreword: "Rich and wholesome living calls for celebrations and sharing; there is beauty and zest and social satisfaction and re-creation wherever we may be, if we have but learned to see and react creatively to the resources of the environment" (p. v).

The Table of Contents is much more of a synopsis than is usual, the important subtitles in each of the eight chapters being shown, and the portfolio of pictures is articulated to the printed account by page references. Perhaps the heart of the book is chapter iv, "Creativeness in the Major Activities of Programs." Among the subheads in this chapter are "Activities of the Dramatic Type," "Exhibits," "Mock Conventions," and "Verse-speaking Choir Activities." Chapter viii records the program materials actually used in one county. It affords a wealth of proved illustrative materials, together with elaborate lists of reference materials for programs in connection with many phases of modern school work, such as transportation, Colonial days, songs and dances from other lands, Christmas, and other special days.

One of the best features of the book is a "Selective Bibliography," well organized and annotated. The simple, direct style used is also commendable, and there is everywhere unmistakable evidence of sound theory and effective practice. Both authors occupy strategic positions for the improvement of teaching in their own right, and they have drawn liberally on other recent contributions, especially those of their adviser, Fannie W. Dunn.

Users of this book may need to be on guard against two dangers: (1) the implications of the title and (2) unwise emphasis of the program. The wording of the title seems unfortunate, for "Creative Ways for Children's Programs" may suggest that *creative ways* are in the school in order that children may have programs, whereas exactly the opposite is more nearly the true view; that is, *creative ways* and *children's programs* are two of the several means by which effective schools should minister to the expression needs of children. Neither

[1] Josephine Murray and Effie G. Bathurst, *Creative Ways for Children's Programs*. New York: Silver Burdett Co., 1938. Pp. xiv+396.

should be *for* the other, least of all creative ways for *programs;* both should be for *children.* Perhaps a better title would have been "Children's Programs from Their Creative Work."

The text of the book is, for the most part, free from this limitation. For example, in chapter vii, "Educative Values of Creative Programs," the authors state, "The greatest educational value of the program is the creative work the children put into it" (p. 205).

The title of chapter viii, "The Program Materials of One County," may also be misleading. This wording might indicate that the reason for having the very valuable subject matter as listed, for example, "Transportation," "How Different People Work," is to provide material *for* programs; but the very first paragraph of the chapter will set the reader right in this respect: "Much useful subject matter and many different activities contain material for programs. As shown in the foregoing pages, both the activities and the subject matter usually belong to major units in the regular class work. *When the children want to share what they learn, they plan programs*" (p. 249—italics by the reviewer). A more accurate wording for this chapter title might have been "Program Opportunities in the Subject Matter of One County."

The possible danger of unwise emphasis on learning *in order to have* programs arises from the very convincingness of the book, for example, in chapter viii: "It is advisable for teacher and children, as they develop school activities, to build up from day to day an index of materials. This is helpful in developing programs and also for use in other activities" (p. 249). The chapter then shows how children may be set to searching through their school work for program opportunities to be catalogued and filed. This procedure is excellent in itself, but it might easily result in being careful to have programs *whenever you can find an opportunity* rather than having programs "when the children want to share what they learn."

These possible dangers can be readily avoided if the teacher is provided with equally effective aids in each of the several means of socialized sharing. Besides programs, these opportunities for expression include informal dramatization, pupil group conferences, school publications, shopwork, art, the dance, intramural games, bulletin-board displays, museum exhibits, school (or room) open house. *Creative Ways for Children's Programs* sets a high standard for this type of teacher help.

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A Comprehensive Guide for Teacher Selection in Large Cities.—Most research deals, of necessity, with a single and often a small phase of a large problem. Now and then, however, an investigator braves the charge of superficiality and the danger of inadequately supported generalizations and attempts to encompass a large area within the scope of one investigation. Coul-

bourn[1] has produced a study of this general type which deals with all the more important phases of teacher selection in city school systems. Because the study is comprehensive, it will be read with genuine interest by administrative officers of city schools who wish to check their practices against the procedures recommended.

The author bases his recommendations on present practices in the thirty-seven cities in the United States with populations of 250,000 or more, harmonizing these recommendations, where necessary, with authoritative expressions of opinion, which are grouped under nineteen criteria. The criteria include such generally approved statements as, "The selection of teachers should be based upon merit" (p. 13), as well as commitments concerning matters on which there is not complete agreement, such as, "The use of the written examination as a procedure in teacher selection is very limited and need not be a necessary requirement" (p. 20). The method of investigation used seems, on the whole, to be sound, except that the results of research are given too little weight in the formulation of the criteria and undue emphasis is placed on opinion. For example, although the numerous researches which have sought to isolate the factors that contribute to teaching success are inconclusive, Coulbourn speaks with assurance in discussing the application blank and the interview and the weighting that should be given to the information obtained by these means.

Aside from the weakness just pointed out, this study of teacher selection is most constructive and helpful. Many of the findings naturally verify accepted practice. Others, however, have not been so generally adopted. Following are a few of the latter type: (1) School systems should aggressively seek candidates for teaching positions by maintaining contact with training institutions and with other city school systems. Too much dependence is generally placed on unsolicited applications. (2) The usefulness of application blanks and rating sheets is determined, in large part, by the care with which they are made up. Constructive suggestions regarding organization and content are given. (3) Applications and letters of reference should be systematically rated by at least three competent examiners. (4) As a means of avoiding the obtaining of only a random impression, check sheets should be used by the interviewers as guides, and the sheets should be filled out immediately after the interview. (5) Medical examinations should be thorough and should be given by a doctor under the direction of the city school system which is considering the applicant rather than by a physician chosen by the applicant. (6) Uniform minimum requirements of years of training are recommended for both elementary- and secondary-school teachers, the suggestion being that, ideally, all teachers should have four years of general college work followed by two or three years of professional training. (7) The probationary period, which should generally not extend be-

[1] John Coulbourn, *Selection of Teachers in Large City School Systems.* Teachers College Contributions to Education, No. 740. New York: Teachers College, Columbia University, 1938. Pp. x+178. $1.85.

yond two years, should be a time during which positive efforts are made to promote teacher growth in service. If state laws permit, the teacher should be put on indefinite tenure as soon as he has demonstrated his fitness. Conversely, if a teacher proves himself incompetent within a short time, he should be notified in order that he may not be misled into believing that permanency of tenure lies ahead. (8) There should be an upper age limit of forty to forty-five years for new appointments. High standards of training will make a prescribed lower age limit unnecessary.

This study brings together in readable and immediately usable form the most authentic practices known today with regard to teacher selection in large school systems. It appears that, except for the type of administrative organization involved, most of the recommended procedures apply almost equally well to schools in smaller cities. Naturally the study cannot be accepted as the final word. Many of the areas considered will be subjected to more intensive investigation. The areas in which further investigation is needed are, however, made the clearer by the general survey that is presented.

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PROMOTING MENTAL HEALTH THROUGH PLAY.—Every person associated with any phase of the guidance of the growth and the development of children is today tremendously interested in the relation existing between the mental health and the play life of the child. John Eisele Davis,[1] of the Veterans' Administration Facility, Perry Point, Maryland, has attempted "to present the subject of play as usable material for the organization of effective mental-hygiene practices in school" (p. xiii). The subject is intriguingly set up in the Table of Contents under headings of "Play and Psychic Adjustment," "Play and Adjustment to the Outside World," "Play and Behavior," and "Happy Socialization."

The book is difficult to read. The author has repeated himself over and over in distressingly complex sentences entailing endless re-reading. The pages of the book are loaded with "circumcerebrations" and circumlocutions that make it questionable whether the interest of even the exceptional educator could be held.

The author's entire treatise is based on this introductory statement:

> It is fundamental to consider how disorderly and difficult is the struggle of the child toward maturity. He is expected to transform himself in a very short time from an egocentric animal into a socialized being. . . . . He must gradually cast aside the strong primitive urges which so powerfully drive him to live and to love in unconventional and even strange ways [p. xiii].

Much space and many words are wasted in elaborating on such statements as, "The observant teacher will note that the child's behavior is very different when he is with others from what it is when he is alone" (p. 5).

[1] John Eisele Davis, *Play and Mental Health: Principles and Practice for Teachers.* New York: A. S. Barnes & Co., 1938. Pp. xvi+202. $2.50.

The conclusions of the author are:

There are five important qualities in promoting a more ideal play: First, the experience should be thoroughly honest. Second, the particular play activity should be adapted to developmental age and interest. Third, participants should be given the satisfaction which comes from equal chances of winning. From the mental hygienic standpoint one-sided games are harmful. Fourth, play should be presented as a co-operative social experience rather than a physical struggle for individual dominance. Fifth, the objectives set forth should emphasize the group-winning ideal and lasting satisfaction which accrues to the lone individual when winning with the group [p. 190].

The hope of the author, but most certainly not a result made easier of accomplishment by reading the volume, is expressed in the final sentence: "The teacher of physical education should assist the child to form an acceptable concept of the most effective personality and aid him in establishing it and proving its validity in a co-operative and yet competitive society" (p.196).

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

BOND, HORACE MANN. *Negro Education in Alabama: A Study in Cotton and Steel.* The Susan Colver Rosenberger Prize Essay, 1937, The University of Chicago. Washington: Associated Publishers, Inc., 1939. Pp. 358. $3.25.

BORGESON, GERTRUDE M. *Techniques Used by the Teacher during the Nursery School Luncheon Period.* Child Development Monographs, No. 24. New York: Teachers College, Columbia University, 1938. Pp. xiv+214. $2.35.

BREED, FREDERICK S. *Education and the New Realism.* New York: Macmillan Co., 1939. Pp. xx+236. $2.00.

CHISHOLM, LESLIE L. *The Shifting of Federal Taxes and Its Implications for the Public Schools.* Journal of Experimental Education Research Monograph, No. 1. Madison, Wisconsin: Journal of Experimental Education, 1939. Pp. 84.

Cooperation: Principles and Practices. Eleventh Yearbook of the Department of Supervisors and Directors of Instruction. Washington: Department of Supervisors and Directors of Instruction of the National Education Association, 1939. Pp. x+244.

EVANS, ROBERT O. *Practices, Trends, and Issues in Reporting to Parents on the Welfare of the Child in School: Principles upon Which an Effective Program May Be Built.* New York: Teachers College, Columbia University, 1938. Pp. vi+98. $1.05.

FORSYTHE, CHARLES E. *The Administration of High School Athletics.* New York: Prentice-Hall, Inc., 1939. Pp. xviii+414. $2.00.

FREEMAN, FRANK N. *Mental Tests: Their History, Principles & Applications.* Boston: Houghton Mifflin Co., 1939 (revised). Pp. x+460. $2.50.

From School to College: A Study of the Transition Experience. Conducted by Lincoln B. Hale, in co-operation with D. W. Bailey, G. H. Menke, D. DeK. Rugh, and G. E. Schlesser. Yale Studies in Religious Education, XI. New Haven, Connecticut: Yale University Press, 1939. Pp. xxiv+446. $3.50.

HINMAN, STRONG. *Physical Education in the Elementary Grades.* New York: Prentice-Hall, Inc., 1939. Pp. viii+524. $2.00.

The Implications of Research for the Classroom Teacher. Joint Yearbook of the American Educational Research Association and the Department of Classroom Teachers. Washington: National Education Association, 1939. Pp. 318. $1.00.

MCCALL, WILLIAM A. *Measurement.* A revision of *How To Measure in Education.* New York: Macmillan Co., 1939. Pp. xvi+536. $4.00.

MALLER, JULIUS B. *School and Community: A Study of the Demographic and Economic Background of Education in the State of New York.* The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., Inc , 1938. Pp. xiv+360. $3.50.

REEDER, WARD G. *The Administration of Pupil Transportation.* Columbus, Ohio: Educators' Press, 1939. Pp. xii+200. $2.50.

THORNDIKE, EDWARD L. *Education as Cause and as Symptom.* The Kappa Delta Pi Lecture Series. New York: Macmillan Co., 1939. Pp. xiv+92. $1.25.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

AITCHISON, ALISON E. *Europe: The Great Trader.* Indianapolis, Indiana: Bobbs-Merrill Co., 1939. Pp. vi+424. $1.04.

BAUER, W. W., and EDGLEY, LESLIE. *Your Health Dramatized: Selected Radio Scripts.* New York: E. P. Dutton & Co., Inc., 1939. Pp. x+528. $2.25.

COMSTOCK, ANNA BOTSFORD. *Handbook of Nature-Study.* Ithaca, New York: Comstock Publishing Co., Inc., 1939 (revised). Pp. xx+938. $4.00.

FARGO, LUCILE F. *Activity Book for School Libraries.* Chicago: American Library Association, 1938. Pp. xii+208. $2.50.

FEDDER, RUTH. *A Girl Grows Up.* New York: Whittlesey House, McGraw-Hill Book Co., Inc., 1939. Pp. xx+236. $1.24.

The Follett Picture-Stories: *Butterflies and Moths* by Alta McIntire, pp. 40; *The Clothes We Wear* by Jonathan Yale, pp. 38; *A Letter for Lucy To Answer* by Mary Katherine Chapin; *A Letter for Mother To Read* by Mary Katherine Chapin; *The Magic of Cloth* by Jonathan Yale, pp. 40; *Words on Wings* by Jonathan Yale, pp. 40. Chicago: Follett Publishing Co., 1938. $0.15 (paper); $0.60 (cloth).

GATES, ARTHUR I. Gates Reading Survey for Grades 3 to 10. New York: Teachers College, Columbia University, 1939.

GREENAN, JOHN T., and GATHANY, J. MADISON. *Units in World History: Development of Modern Europe.* New York: McGraw-Hill Book Co., Inc., 1939 (revised). Pp. xxii+858. $2.32.

OLCOTT, VIRGINIA. *Olaf and Ane: Children of the Northland.* New York: Silver Burdett Co., 1938. Pp. viii+168. $0.96.

PAHLOW, EDWIN W. *Directed Studies in World History To Accompany "Man's Great Adventure" (revised).* Boston: Ginn & Co., 1939. Pp. iv+128+tests. $0.48.

Safe and Healthy Living: I, *Spick and Span* by J. Mace Andress, I. H. Goldberger, and Marguerite P. Dolch, pp. viii+142, $0.64; II, *The Health Parade* by J. Mace Andress, I. H. Goldberger, and Marguerite P. Dolch, pp. viii+168, $0.72; III, *Growing Big and Strong* by J. Mace Andress, I. H. Goldberger, and Marguerite P. Dolch, pp. x+236, $0.76; IV, *Safety Every Day* by J. Mace Andress, I. H. Goldberger, Elizabeth B. Jenkins, and Marguerite P. Dolch, pp. x+234, $0.76; V, *Doing Your Best for Health* by J. Mace Andress, I. H. Goldberger, and Grace T. Hallock, pp. viii+264, $0.80; *Building Good Health* by J. Mace Andress, I. H. Goldberger, and Grace T. Hallock, pp. viii+274, $0.84; VII, *Helping the Body in Its Work* by J. Mace Andress, I. H. Goldberger, and Grace T. Hallock, pp. viii+284, $0.84; VIII, *The Healthy Home and Community* by J. Mace Andress, I. H. Goldberger, and Grace T. Hallock, pp. viii+298, $0.88. Boston: Ginn & Co., 1939.

SMITH, NILA B., and HEINZ, KATHRYN. *Come and Play.* The Unit-Activity Reading Series. New York: Silver Burdett Co., 1938. Pp. 40. $0.20.

STOLPER, B. J. R. *The Group Poem: A Two-Day Unit in a New Sort of Verse.* New York: Teachers College, Columbia University, 1938. Pp. 98. $1.00.

THOMAS, CHARLES SWAIN; PAINE, MYRA ADELINE; and ENSWEILER, NELLE GLOVER. *Thought and Expression,* Book I. A Textbook Designed To Develop Better Habits of Thinking and Greater Skill in English Expression. New York: Longmans, Green & Co., 1939. Pp. viii+536 $1.56.

WEAVER, ROBERT B. *Amusements and Sports in American Life.* Chicago: University of Chicago Press, 1939. Pp. xiv+196. $1.00.

WILLIAMSON, R. M., and BLACKHURST, J. H. "Safety: Home, Field, Street." Des Moines, Iowa: University Press, 1939. 26 posters, with instruction.

WRIGHTSTONE, J. WAYNE. Test of Critical Thinking in the Social Studies (Elementary School Series). New York: Teachers College, Columbia University, 1938.

PUBLICATIONS IN PAMPHLET FORM

Analysis of the Statutory Provisions for State Teachers Retirement Systems. Washington: Research Division and National Council on Teacher Retirement of the National Education Association, 1939. Pp. 30. $0.25.

ARTZ, FREDERICK B. *L'Education technique en France au dix-huitième siècle (1700–1789).* Paris, France: Librairie Félix Alcan (108, Boulevard Saint-Germain), 1939. Pp. 52.

CAMPBELL, DOAK S., BAIR, FREDERICK H., and HARVEY, OSWALD L. *Educational Activities of the Works Progress Administration.* Advisory Committee on Education, Staff Study No. 14. Washington: Government Printing Office, 1939. Pp. xiv+186. $0.25.

Critical Analysis of Teacher Tenure Legislation. Washington: Committee on Tenure, National Education Association, 1939. Pp. 32. $0.25.

CUFF, R. P. *A Guide to the Literary Reading of College Freshmen.* Boston: Chapman & Grimes, 1938. Pp. 64. $0.50.

Educational Tests and Their Uses. Review of Educational Research, Vol. VIII, No. 5. Washington: American Educational Research Association, 1938. Pp. 493–596. $1.00.

FRASIER, P. G. *Occupational Trends in Iowa with Implications for Vocational Education,* Bulletin No. 27, Research Series 1, pp. 36; *Changes in the Occupational Pattern of Iowa,* Bulletin No. 28, Research Series 2, pp. 42; *Occupational Trends in the Production Occupations of Iowa,* Bulletin No. 30, Research Series 3, pp. 40; *Occupational Trends in the Distributive Occupations of Iowa,* Bulletin No. 31, Research Series 4, pp. 32; *Occupational Trends in the Service Occupations of Iowa,* Bulletin No. 32, Research Series 5, pp. 48. Des Moines, Iowa: State Board for Vocational Education, 1938.

MORT, PAUL R., CORNELL, F. G., and HINTON, NORMAN H. What Should Our Schools Do? A Poll of Public Opinion on the School Program. New York: Teachers College, Columbia University, 1938.

NATIONAL OCCUPATIONAL CONFERENCE. *An Appraisal and Abstract of Available Literature on: The Occupation of the Bricklayer,* pp. 8; *The Occupation of the Butcher,* pp. 10; *The Occupation of the Dentist,* pp. 12; *The Occupation of the Sheet Metal Worker,* pp. 8; *The Occupation of the Veterinarian,* pp. 10. New York: National Occupational Conference (551 Fifth Avenue), 1938 and 1939. $0.10 each.

NETZER, ROYAL F. *The Evaluation of a Technique for Measuring Improvement in Oral Composition.* Research Studies in Elementary School Language, No. 2. University of Iowa Studies in Education, Vol. X, No. 4. Iowa City, Iowa: University of Iowa, 1939. Pp. 48.

Oral English for Secondary Schools. Bulletin 283. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 14.

REEDER, WARD G. *A Manual for the School Bus Driver.* Columbus, Ohio: Educators' Press, 1939. Pp. iv+42. $0.50.

Safety Education in Industrial School Shops: A Study of Accidents in School Shops, Their Causes, and Recommendations for Approved Procedures. Bulletin 332. Harrisburg, Pennsylvania: State Department of Public Instruction, 1938. Pp. 88.

The Teaching of Oral and Written Expression in Maryland High Schools. Maryland School Bulletin, Vol. XX, No. 3. Baltimore: State Department of Education, 1939. Pp. 116. $0.30.

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Educational News and Editorial Comment

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Population Trends in Certain American Communities

SINCE early Colonial days population in this country has grown rapidly. For a hundred years and more before the Civil War, it doubled on the average every twenty-four or twenty-five years, and between 1868 and 1890 it doubled again. Between 1920 and 1930 the total population of the United States increased by about seventeen millions—the largest absolute increase in numbers for any decade in our history. This increase in absolute numbers has tended to mask the effects of the falling birth-rate, to mask the fact that the rate of increase of population is declining and that as a people we are moving rather swiftly in the direction of cessation of population growth. Estimates of net reproduction rates indicate that as a people we are not now having enough children to maintain the population at its present level. This is true of the total urban population, and it is particularly true of the larger cities. According to estimates of net reproduction rates made by Bernard D. Karpinos and published in the *Population Index* for January, 1938, there are only two cities in the entire United States in which fertility among the white population is sufficiently great for family replacement. These two cities are Gary, Indiana, and Flint, Michigan. Of the ninety-

three cities having populations of a hundred thousand or more in 1930, twenty-seven had net reproduction indices of less than 0.75, an index of 1.00 being necessary to maintain the population at its present level. Three of these cities (Albany, New York, and Rochester) are in the Middle Atlantic states; four cities (Minneapolis, Des Moines, Kansas City, and St. Louis), in the West North Central states; four cities (Washington, Richmond, Atlanta, and Tampa), in the South Atlantic states; one city (Memphis), in the East South Central states; six cities (New Orleans, Dallas, El Paso, Fort Worth, Houston, and San Antonio), in the West South Central states; one city (Denver), in the Mountain states; and eight cities (Seattle, Spokane, Portland, Long Beach, Los Angeles, Oakland, San Diego, and San Francisco), in the Pacific states. The net reproduction index is above 1.00 in fourteen of the ninety-eight cities having populations between fifty thousand and one hundred thousand. These fourteen cities are located in six states: Massachusetts, Pennsylvania, Ohio, Michigan, Wisconsin, and Texas.

Normally, natural increase (an excess of births over deaths) in a community continues for a period of time after the reproduction index falls below 1.00. In many American communities, however, natural decrease (an excess of deaths over births) has already set in. Harold F. Dorn, in a recent number of the *Journal of the American Statistical Association,* comments as follows on the natural decrease of population in certain American communities:

> It is difficult for many persons to realize not only the rapidity with which the birth-rate is now declining, but also the very low level which it has reached in many parts of the nation. There is a tendency to regard persons who forecast a declining population in the near future as fomenters of a population scare. Regardless of whether it is preferable to have faith that human beings will always reproduce themselves because they have done so for many centuries or to believe that the only lower limit to the decline in birth-rate is zero and that the population is doomed to ultimately die out or to be absorbed by some more prolific people, it is desirable not to ignore the actual difference between the crude birth- and death-rates now existing in many American communities.
>
> Various estimates of the intrinsic reproduction rate of the total population as well as that of the population living in different-sized communities have been published, but until very recently it has been impossible to accurately estimate the crude rate of natural change of the population living in different-sized communities due to the fact that births and deaths were not tabulated

by residence in the published reports of the Bureau of the Census. Beginning with the records for 1935 the Bureau of the Census is tabulating total births and deaths by place of residence so that it is now possible to obtain fairly accurate crude rates of natural change for individual cities. . . . .

The following data are for the years 1935 and 1936, the only years for which births and deaths tabulated by place of residence are now available. Although the crude birth- and death-rates for the smaller cities fluctuate rather widely from year to year, the birth- and death-rates for the two years combined for the total country are identical with the average rates for 1933–37.

NUMBER OF BIRTHS AND DEATHS IN TOTAL POPULATION FOR 1935–36, AND THE ESTIMATED NET REPRODUCTION RATE OF THE WHITE POPULATION IN 1930 FOR CITIES OF 50,000 OR MORE POPULATION IN 1930 WITH A CRUDE RATE OF NATURAL DECREASE 1935–36*

City	Births	Deaths	Net Reproduction Rate	City	Births	Deaths	Net Reproduction Rate
Cities of 100,000 or more:				Cities of 50,000–99,999 (*cont.*):			
Albany	3,386	3,470	.73	Harrisburg	2,100	2,122	.71
Richmond	5,356	5,388	.66	Terre Haute	1,885	1,994	.74
Seattle	8,643	8,782	.61	St. Joseph	2,171	2,668	.64
Oakland	6,827	7,176	.60	Oak Park	1,292	1,327	.65
San Francisco	13,302	16,420	.46	Columbia	1,749	2,451	.74
				Savannah	3,101	3,256	.76
Cities of 50,000–99,999:				Covington	1,580	1,834	.90
				Little Rock	2,198	3,162	.58
Troy	1,653	2,216	.67	Glendale	1,267	1,437	.63
Atlantic City	1,612	1,995	.25	Pasadena	1,636	2,139	.51
Cleveland Heights	295	783	.73	Sacramento	2,767	2,855	.65

* Net reproduction rate as computed by Dr. Bernard D. Karpinos, *Population Index*, pp. 60–63, January, 1938. The net reproduction rate represents the average number of daughters which a female infant would bear if subject throughout her lifetime to a fixed set of fertility and mortality rates. The rates used were those prevailing in 1930. A net reproduction rate of 1.00 means that the population would remain stationary in number in the absence of migration, while a net reproduction rate of [illegible] a population would decrease in number in the absence of migration. For example, [illegible] means that 100 female infants, if subject throughout their lifetime to the fertility [illegible] ing in 1930, would bear only 73 daughters.

More deaths than births were registered in 1935–36 in 145 counties with a total population of 8,267,000 in 1930. Forty-two per cent of the population in these counties is in the Middle Atlantic states, and 31 per cent lives in the three Pacific Coast states.

A rate of *natural decrease* was reported in 255 separate communities in 1935–36; the total population of these places in 1930 was 8,050,000. Although more of these are in the Middle Atlantic and Pacific divisions than elsewhere, every geographic region is represented. New York with 16 out of 62 counties and California with 19 out of 58 counties reporting more deaths than births repre-

sent the areas of most widespread natural population decrease. Even the South, which has the highest birth-rate of any major section of the nation, has several large cities reporting more deaths than births. The largest of these are Richmond, Virginia; Columbia, South Carolina; Savannah, Georgia; Covington, Kentucky; and Little Rock, Arkansas.

Five of the 93 cities with 100,000 or more population in 1930 must now depend upon migration to maintain their population [see the accompanying table]. More deaths than births were reported in Nevada for three of the nine years from 1929–37, although this may be the result in part of the incomplete registration of births. The total natural increase reported in Nevada from 1929–37 was 804. All of the cities in the table have very low net reproduction rates which strengthens the belief that their crude rates of natural decrease are real and not the result of unusual fluctuations.

It is thus apparent that an appreciable number of communities in all parts of the country will begin to decrease in population unless migration from other areas offsets the loss arising from the excess of deaths over births. Attention is called to these facts in order to convince even the most doubtful skeptic that the rate of growth of the population not only is slowing down but that it is also changing to a rate of decrease in many places. In view of widespread unemployment this may, at first sight, be regarded as a boon. However, this is largely illusory since the present births will not be old enough to be either employed or unemployed for another twenty years. It is important to remember that the full effects of changes in the birth-rate are not noticed until about a generation after they occur.

These data have been presented not in an attempt to create a population scare, but rather to call attention to a situation which will undoubtedly become more widespread in the near future. If hasty and ill conceived proposals for the control of population change are to be avoided, it is important that the consequences of present trends in birth- and death-rates be anticipated long before the problem becomes acute enough for public action.

Education as a Means of Social Control and Direction

In a recent issue of the *Curriculum Journal* Percy E. Davidson, of Stanford University, discusses the social task of education. What he says is of such pertinence that we feel justified in quoting it at some length.

As a profession we were slow to catch the fateful significance of public education, perhaps because of our material good fortune and our natural youthful optimism. We were not without earlier instruction, however. The famous cardinal principles hinted at the social task of education without reaching to the core of the matter. Education was to be for sound citizenship, for economic

and occupational adjustment, for worthy home membership, and for the worthy use of leisure time—in short, for living a good life somehow, somewhere. But they neglected to tell us of the actual circumstances in which these worthy ends were to be realized. Like a blunderbuss, each of these principles discharged its load into the wide world in the hope that some stray shot might find a mark.

But it is with the exact marksmanship of the modern rifle that social aims are to be taken today. We now know that the circumstances affecting any particular line of educational effort are specific and particular. We no longer hope to affect the social scene with rosy aspirations and sweeping formulas. We see at last that efficacious educational programs come only after meticulous study of social realities in every department of living, and of the subtle processes that maintain and explain them. This has required a new addition to our historical stock in trade.

The study which has emerged to meet this new need goes under the clumsy name of educational sociology. As yet it is a puling infant, but a lusty one nevertheless, because the course of events [is] in its favor. It is still borrowing its sustenance from its mother—general social science—upon whom it must ever draw for much of its guidance. But it is on the way to the discovery of its own identity and its own problems.

A solid body of new knowledge must be accumulated dealing in detail with all the social circumstances affecting our educational enterprise. It must be gathered by sound and authentic scientific methods. It must rise above minutiae and the accumulation of odds and ends to the level of far-reaching social-educational generalizations; it must keep in step with the authoritative teachings of the masters of sociology, economics, and political science, and be recognized by them not only as authentic knowledge, but as highly significant knowledge for the direction of public affairs.

We sometimes speak of social planning as if it belonged to the future. But social planning is all about us. Italy and Germany are planning an economy in terms of the peculiar aspirations of their governing groups. Russia is planning. So are Sweden and Japan and Spain. Even the European democracies are beginning to define their national plans. The New Deal itself, whatever you may think of it, is a symptom of planning in our own country. New administrations may alter its character; no one expects any future administration to return to the planlessness of unregulated laissez faire.

Can it be doubted that modern culture is moving slowly into an epoch of deliberate social planning? If this is so education cannot remain planless. With the best wisdom we can summon, and with all the aid we can possibly have from the social sciences and from other allied fields, including the comparative study of nations and their cultures, we must endeavor to catch the meaning of modern trends and to align our programs and practices with them. This seems to be the essence of the social task of education that confronts us today. Let us hope that our resources may not fall short of its exactions.

Selected and Annotated References in Education

Regular readers of the *Elementary School Journal* and the *School Review* will know that these periodicals join in publishing each year a cycle of twenty lists of selected references. The lists are organized to comprehend practically the entire field of education, so that the reader's general and special interests are recognized. The items in the lists are selected by recognized specialists, who also prepare annotations indicating scope and significance. Not all readers may know that the complete cycle for each calendar year has been assembled and published in monograph form as a "Supplementary Educational Monograph." The monograph for the last calendar year is now ready for distribution as *Selected References in Education, 1938*—the sixth in the series bearing similar titles.

The price asked for copies of *Selected References in Education, 1938*, is ninety cents. Any additional monograph may be secured for sixty cents. Persons desiring access to the complete bibliographical service of about 1,200 pages containing more than 7,600 annotated items may purchase the full set of six monographs for three dollars, delivered. Orders should be sent to the Department of Education, 5835 Kimbark Avenue, Chicago, Illinois.

A New Technique for Training in Reading

Harvard University, through its news office, has made public the following statement.

In the first experimental test of a new motion-picture technique for training in reading, developed at the Harvard Graduate School of Education, a group of sixteen Harvard Freshmen showed marked improvement in reading skill and some advance in scholastic standing after eight weeks of special training last autumn.

Under the training, the students as a group increased their reading speed by 50 per cent, gained in reading accuracy, and altered for the better their habits of eye-movement. That they should also, as a group, improve in scholarship, even by a small amount, seems especially important considering the many factors other than ability to read which contribute to college grades. This is, of course, only a first experiment with a small number of cases, but the results are so promising that it is planned to repeat it next autumn and also to observe how permanent the results may be.

After a year spent in developing the new technique for training in reading, film material is now ready for distribution to high schools and colleges, the

Harvard Film Service reported. By April, films will be ready for training children of Grades III–V; by autumn, for Grades VI–IX.

This new technique for training in reading, which has been developed by Professor Walter F. Dearborn, director of the Harvard Psycho-educational Clinic, and Dr. Irving H. Anderson, instructor in education, with the co-operation of James R. Brewster, director of the Harvard Film Service, gives promise of being, partly because of the novelty of its appeal and its concreteness, one of the most effective devices for the improvement of skills in reading. It can be used by any individual or institution possessing an ordinary sixteen-millimeter movie projector.

The experimental training program for Harvard Freshmen was directed by Dr. Anderson in co-operation with the Dean's Office of Harvard College. Progress of the experimental group was compared with the records made by a control group of sixteen Freshmen, with similar admission records, which was given no special training.

Photographs of eye-movements showed that the experimental group increased its reading speed on the average from 251 to 382 words a minute during the training period, Dr. Anderson reported. The number of eye-fixations, or stops, per line of reading was reduced from 10.8 to 6.5 and the average number of regressions from two every three lines to one every two.

Comparison of midyear with November grades showed that, while ten students in the experimental group had made definite improvement, only five of the control group had better records. The average gain of the former as a whole was significant also, while that of the latter was not.

Final eye-movement records of the experimental group showed a fundamental change in reading habits and also a change in reading attitude, Dr. Anderson reported. The students were beginning for the first time to exercise control over the eye-movements in reading. How permanent these changes will prove to be will quite certainly depend on the intentions of the learners and will, of course, vary with the individuals. But these students now know that it is possible to improve, and some of them will find the results worth continuing their efforts.

Through the movies, the eyes of the spectator are forced to follow the movements that a skilful reader's eyes would follow. The movie shows successive phrases flashed rapidly across and down the screen in such a way that the reader's eyes are involuntarily attracted to each group of words as it appears. It is the training thus received that benefits the reader.

Bulletins and Pamphlets of Special Interest

Among the many bulletins and pamphlets that have come to our desk in recent weeks, those commented on in the following paragraphs should be of special interest to teachers, principals, and superintendents.

Guide for laymen in the study of the public schools

Some time ago the American Association of University Women requested the United States Office of Education to prepare outlines for the study of the proper conduct of a public-school system. These study outlines have now been published in a series of leaflets under the general title "Know Your School." The specific titles of the four leaflets already published are *Know Your Board of Education*, *Know Your Superintendent*, *Know Your School Principal*, and *Know Your Teacher*. Each leaflet presents clearly and concisely a body of information which should be of great value to the intelligent layman. For example, in the leaflet dealing with the board of education, the following major topics are discussed: "Qualifications," "Selection," "Organization," "Powers and Functions." The leaflet *Know Your Superintendent* lists some of the powers and the duties of the superintendent and mentions some of the relationships that should exist between him and the board of education and between him and business officials, supervisors, principals, teachers, pupils, and the community. The leaflet dealing with teachers discusses some of the most important things that one should know in order to understand a school system, for example, the qualifications of teachers; their duties and responsibilities; and their relations to the school board, the superintendent, patrons, and the community in general. Each leaflet contains suggestions for investigation and discussion and a list of selected references. This series of leaflets should serve a very useful purpose as a guide to any group of lay citizens who may wish to arrive at a better understanding of their public-school system.

A summary of requirements for teachers' and administrators' certificates

Robert C. Woellner and M. Aurilla Wood are the authors of a useful handbook published by the University of Chicago Press under the title *Requirements for Certification of Teachers and Administrators*. The purpose of the publication is to offer readily interpreted summaries of the requirements for obtaining certificates to teach at the elementary-school, high-school, and junior-college levels. The requirements for administrative certificates are also summarized. Statements of the recommendations

of the various regional accrediting associations regarding the qualifications of teachers are also included. This publication will be of special interest to prospective teachers and to counselors of teachers in training. It will also prove valuable to persons who are interested in the development of trends in teacher certification, particularly so since it is one of a series of similar documents published annually since 1933.

Improving the standards for city superintendents It is generally recognized, although the knowledge is too seldom acted on, that the successful operation of a city school system depends, in large measure, on the qualifications that the city superintendent brings to his job. The truth is that there are few positions in either public or private life which require a greater intelligence or a wider training than the position of the city superintendent—that is, if the superintendent is to be the vital force that he should be in the community. It is gratifying, therefore, that the American Association of School Administrators is giving attention to the improvement of the qualifications of the members of the profession. The association has recently prepared a bulletin entitled *Standards for Superintendents of Schools*, which summarizes the legal requirements for the superintendency and analyzes the state certification requirements for the office. A chapter is also devoted to a discussion of the special education for the superintendency offered by colleges and universities. The Committee on Certification of Superintendents of Schools, which formulated the report, is not yet prepared to publish its final recommendations, but it presents the following tentative recommendations for study and discussion.

1. The American Association of School Administrators should request the states to take appropriate action necessary to establish the following minimum requirements for entrance to the profession of superintendent of schools:

a) Minimum age of twenty-five years.

b) United States citizenship.

c) A written statement from an approved physician as to soundness of both mental and physical health.

d) Four years of education in a standard and accredited college plus one year of graduate study terminating in the Master's degree. The period of preparation to include both cultural and professional studies in such areas as

political science and government, economics, sociology, public finance, child psychology and hygiene, teacher personnel, school administration, public relations, vocational education, and curriculum development.

e) Three years of successful experience in classroom, administrative, or supervisory positions in public-school systems.

2. The association should expect and encourage its members to acquire education and experience beyond the foregoing minimum requirements.

3. The association should urge state legislatures to enact such laws as to require the selection of all city, county, and state superintendents by appointment rather than by popular election. There is evidence that the appointment procedure will accelerate the acceptance of higher professional standards.

4. The association should ask collegiate institutions to co-operate in standardizing programs for the preparation of superintendents of schools. These plans should include the recruitment and selection of persons with the necessary qualities for leadership in public education. Every effort should be made to avoid a mere collection of courses lacking the essential elements of an integrated program.

5. The association should take the lead in formulating a code of ethics for superintendents similar to the National Education Association's Code of Ethics for Teachers but incorporating ethical principles peculiar to the superintendency. Effort should then be directed toward winning the acceptance of this code of ethics by superintendents' organizations and by boards of education and toward the development of the appropriate procedures whereby the principles of the code would be respected.

6. The association should authorize the development of those standards and procedures for admission to the organization which will promote the general acceptance of the foregoing recommendations. One way of contributing to this end, in addition to the general active membership qualifications set forth in the present constitution, would be the establishment of a fellowship membership requiring advanced professional preparation and experience.

The development of the informal daily program in the state of New York Teachers who are trying to introduce flexibility into the daily program so as to make opportunity for activities which appear more worth while than some of those provided for in the regular time schedule will be interested in a publication of the New York State Association of Elementary Principals which has appeared under the title *The Informal Daily Program*. This bulletin reports the results of a state-wide canvass of the influence that newer practices in elementary education have had on the organization of the school day. Four hundred and seventy-one programs were submitted by teachers in reply to a request sent

out by a committee of the association. Of these, 229 represent some degree of deviation from the typical formal school program. Perhaps the most interesting chapter in the bulletin is the one which analyzes the programs submitted by the teachers.

Revision of curriculums by two state departments Individuals and members of committees dealing with curriculum problems who are interested in curriculum reorganization will find stimulating and suggestive two recent publications: one by the Department of Public Instruction of Michigan and the other by the State Department of Education of Kansas.

The Michigan publication bears the title "Basic Instructional Policy for the Michigan Curriculum Program." It presents the point of view on instruction underlying the Michigan curriculum programs. The discussion is organized around six major topics: (1) "What is education for?" (2) "How shall the decisions be made as to what experiences should be provided for the learner?" (3) "What types of experiences and what organization of these experiences bring about the most effective learning?" (4) "What is the role of the teacher in the instructional program?" (5) "How can individual parents help to improve instruction?" (6) "How can community agencies help improve instruction?" Possible uses of this statement of policy are listed as follows:

This instructional policy may be used in a wide variety of ways. Among them may be mentioned the following:

1. Serve as a point of departure for local school systems engaged in the formulation of their basic beliefs and judgments with respect to the improvement of their instructional program.

2. Provide a common background for the work of the various subcommittees of the program concerned with particular aspects of curriculum development.

3. Present to parents and to lay persons generally a systematic statement of the point of view in the Michigan curriculum program in terms of which these groups may plan their own activities of implementation and assistance.

4. Provide for professional organizations of teachers at various levels and in various subject fields a point of reference in relation to which their own programs may be fitted.

5. Offer to thoughtful teachers a statement of basic educational values against which they may check their own educational beliefs and practices.

6. Provide for teacher-training institutions a pattern of educational values which may aid in planning the experiences provided for the training of teachers.

7. Present the basic instructional ideas of the curriculum program to lay organizations interested in education, such as the Michigan Council of Parents and Teachers, the American Association of University Women, and the American Legion.

8. Provide lecturers, editors, public officials, and other state agencies with a precise statement of educational trends and values as interpreted by the Michigan program.

9. Provide a guide to the evaluation of the purposes and procedures of an instructional program.

10. Serve the Steering Committee as a record of agreement on basis values.

The second publication is entitled *A Scope and Sequence Bulletin in the Kansas Program for the Improvement of Instruction.* The general purpose of this bulletin is indicated by the following quotation from the Introduction.

The purpose of this bulletin is to present a plan for working into the day-by-day program of the school a point of view about education that the teachers of Kansas have developed. Therefore it contains a suggested plan for defining the scope and sequence of the curriculum, a possible organization of the day's program of schoolroom living, and suggestions for organizing the core program and making administrative adjustments for introducing it. . . . .

The plan in general presents a core program for all children in Grades I through XIV in the form of broad fields of subject matter. These include the fields of health and science, social sciences, and English. Materials are presented in these fields, and suggestions are made for adapting the program to Kansas school situations as they now are.

Second Annual Conference on Reading

The second annual conference on reading for teachers and school officers of elementary schools, high schools, and junior colleges will be held in Mandel Hall, University of Chicago, June 21–24, inclusive. The central theme of the conference is "Taking Inventory of Recent Developments in Reading." An effort will be made to present objective and impartial appraisals of current trends in reading through the co-operation of specialists from all parts of the country. The programs on successive days of the conference will deal with different general problems: June 21, basic or developmental reading problems; June 22, special problems presented by poor readers; June 23, reading problems in the various curriculum fields; June 24, the stimulation of recreatory reading, and library problems. The com-

plete program for the conference will appear in the June number of the *Elementary School Journal.*

The conference is open without fee to students registered during the summer quarter. For those not registered a fee of $5.00 will be charged for the conference period, or $1.50 a day. To obtain additional information or copies of the program, address William S. Gray, Department of Education, University of Chicago.

Conference of Administrative Officers of Public and Private Schools

The eighth annual conference of administrative officers of public and private schools will be held by the Department of Education of the University of Chicago at Judson Court, College Residence Halls for Men, during the week of July 17–21, 1939. The program in the forenoon will consist of lectures by members of the Department of Education and visiting instructors. Separate round-table discussions for superintendents, high-school principals, and elementary-school principals will be held in the afternoon. Programs of the conference will be mailed to persons applying to Professor William C. Reavis, Department of Education, University of Chicago.

Room and board will be provided, to the extent of the available capacity, in Judson Court for the week, Monday to Friday, for sixteen dollars. Reservations may be made through William J. Mather, Bursar of the University of Chicago.

The conference is open without fee to students registered in the summer quarter and to administrative officers of public and private schools who desire to attend. The general theme of the conference, for which the complete program is given below, is "Democratic Practices in School Administration."

Monday, July 17

Principles of Democratic Administration

"Democracy as an Agency of Social Control," Lloyd A. Cook, Associate Professor of Sociology, Ohio State University

"Principles of Democratic Administration," Floyd W. Reeves, Professor of Administration, University of Chicago

"Difficulties Inherent in the Development of Democratic Practices in City School Administration," DeWitt S. Morgan, Superintendent of Schools, Indianapolis, Indiana

Tuesday, July 18

TRAINING PERSONNEL FOR EFFECTIVE PARTICIPATION IN DEMOCRATIC SCHOOL ADMINISTRATION

"Training Teachers for Effective Participation in Educational Administration," Frank E. Baker, President, State Teachers College, Milwaukee, Wisconsin

"Training Administrative Officers for Democratic Leadership," Ralph W. Tyler, Professor and Chairman of the Department of Education; Chief Examiner, Board of Examinations, University of Chicago

"In-Service Training of Personnel for Effective Participation in City School Administration," C. L. Cushman, Director of the Department of Research and Curriculum, Denver Public Schools; Visiting Professor of Education, University of Chicago (Summer, 1939)

Wednesday, July 19

ORGANIZING A SCHOOL SYSTEM FOR DEMOCRATIC ADMINISTRATION

"The Legal Basis of Democratic Administration," Newton Edwards, Professor of Education, University of Chicago

"Contributions of Teacher Organizations to Democracy in Administration," Edward E. Keener, Principal, Hay Elementary School, Chicago, Illinois

"Fundamentals of Democratic Administration in City School Systems," Nelson B. Henry, Associate Professor of Education, University of Chicago

Thursday, July 20

IMPORTANCE OF DEMOCRATIC PRACTICES IN THE INSTRUCTION AND MANAGEMENT OF PUPILS

"How Much Freedom Should Pupils Be Granted To Choose Their Experiences in Learning?" G. T. Buswell, Professor of Educational Psychology, University of Chicago

"The Effects of Democratic School Practices on the Personality of the Child," Daniel A. Prescott, Professor of Education, University of Chicago

"The Importance of Securing the Participation of Boys in the Reduction of Hazards from Accidents and in the Elimination of Juvenile Crime in Modern Cities," Eliot Ness, Director of Public Safety, City of Cleveland, Cleveland, Ohio

Friday, July 21

EXAMPLES OF DEMOCRATIC PRACTICES IN EDUCATIONAL ADMINISTRATION

"Types of Democratic Practices in Public Schools," Carl C. Byerly, Superintendent of Schools, West Chicago, Illinois

"The Teachers' Council in the Oak Park Schools," William J. Hamilton, Superintendent of Schools, Oak Park, Illinois

"Faculty and Pupil Participation in the Administration of an Experimental School," Ernest Horn, Professor of Education; Director, University Elementary School, University of Iowa

Who's Who for May

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THE OUTLOOK FOR SCHOOL FINANCE IN THE LIGHT OF RECENT TRENDS[1]

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IT WOULD not be surprising if the historians of the future were to decide that the most significant development of the recent past is the gradual acceptance of the view that it is a responsibility of the federal government to attempt to regulate and control the fluctuations of the economy and to safeguard the welfare of certain economic classes unfavorably affected by such fluctuations. The acceptance of this notion has had profound repercussions on our public finances in a number of directions. It has involved heavy subsidies to important economic classes, like the farmer; it has led to unemployment relief on an enormous scale; it has led to the adoption of a program of social security, the full financial implications of which are only now beginning to be understood; it has led to a feeling that the tax system should be harmonized with the general economic policy; and it has even generated a specific demand on the part of an important minority that the tax system be deliberately and consciously used to direct and control economic activity. Indeed, the general question now arises whether we have not set foot on a road whose only terminus is complete economic planning. I am not predicting that we shall proceed steadily toward that terminus; but we have taken several long steps along this road, and it is not yet clear if and when we shall come to a halt.

The second general trend to which I call attention is, in a sense, a corollary to the first. We have in the last few years witnessed the development of deficit financing as a part of the normal and accepted procedure in the federal sphere. As you know, we have not had a balanced budget for a number of years. Since 1932 we have spent

[1] Address delivered on October 5, 1938, before the Education Congress conducted by the Pennsylvania State Department of Public Instruction at Harrisburg, Pennsylvania.

for federal purposes some twenty-four billions of dollars more than we have collected in taxes. One interesting aspect is the extent to which public borrowing has become almost entirely a federal function. In fact, under the arrangements in effect, it has become somewhat of an advantage to a state to be financially embarrassed, even if that embarrassment be artificial in character. Thus, if a state, because of a restriction in its constitution, is unable to borrow, it may stand a better chance of getting assistance from the federal government than if it has no such restriction. There are numerous peculiar anomalies of that sort. During the depression we have had an almost complete breakdown of credit except in the federal sphere. State and local authorities have not had access to the loan market in the manner and the degree that are considered normal, and only a few states have made any extended use of borrowed money. If the states and their political subdivisions are to continue to finance themselves without resort to credit, it will be necessary that their revenue systems be made up of taxes which do not vary greatly in yield with the changing phases of the business cycle. This implication has not been taken fully into account in the thought with reference to the nature of state and local taxation. The amount of leeway that will be tolerable under an arrangement where credit is not utilized as a resource will be limited indeed.

A third trend of importance is the steady deterioration in the quality of the types of taxes in effect. As the amount of money to be collected by taxes has increased, the resulting pressure has forced the resort to bad taxes. Perhaps "forced" is too strong a word. In many cases there has been a choice between developing existing taxes of more attractive types, such as the property tax and the income tax, and resorting to much more crude taxes. However, we have, in many cases, preferred a new tax, even though it be a poor tax. Often the choice of the new tax is supported by a great deal of talk about "tax consciousness." I sometimes wonder whether all this talk is sincere. A very effective way to promote tax consciousness is to increase the old taxes, such as the taxes on property and income. The merit of the new taxes, in the eyes of many of the politicians, lies in the very fact that they do *not* promote tax consciousness.

In connection with this progressive deterioration in the quality of the tax system, I should like to call attention to a few sentences which appear in an account of a recent meeting of the International Association for Public Finance and Fiscal Law, at The Hague. In an address before this body only a few months ago, Professor G. W. J. Bruins, the eminent Dutch economist, said:

> The trend . . . . toward personal taxation (as contrasted with taxes on transactions and similar taxes), characteristic of the pre-war period, has not only been arrested, but has given place to a retreat. Observe, for example, the important position occupied now by the sales tax in its various forms in nearly all fiscal systems, a development comprehensible as such under the circumstances but, nevertheless, involving the revival of a type of taxation that, already a long time before the war, was considered by the most advanced countries as belonging to a period forever closed.[1]

In general, a survey of the types of taxes in the United States today, compared with those in force at the beginning of the depression, reveals much that is discouraging to all of us who hope to see the revenue system of our country develop into something that we can defend as equitable and just. Unfortunately a continuance of this retrogression is in prospect for the next few years.

In the fourth place, because of various factors, not the least of which is the progressive deterioration in the quality of our taxes, we appear to be pressing close to the limit in the aggregate amount that can be raised by taxation under existing economic conditions. Bad taxes bring about a fundamental unbalance between cost and benefit, between burden and product, between the amount a man is asked to give up and his ability to supply it. Bad taxes tend to impair incentives which must be preserved if the productivity of the economy and of the revenue system is to be maintained.

To the handicap of bad taxes we must add the handicap of bad feeling. For example, considerable resentment has arisen in the public mind, based on a conviction that the tax system is being used to accomplish indirectly various objectives which the present administration could not hope to accomplish directly. This feeling of resentment may not be well founded, but of its existence there can be no doubt. Moreover, abuse of the businessman is still, apparently,

[1] *Report of the Inaugural Meeting, February 12, 1938.* The Hague: International Association for Public Finance and Fiscal Law, 1938.

good political policy. We continue to depend primarily on the old incentives and on the private entrepreneurs to bring about productivity, and yet we have not been able to avoid misunderstanding, strife, and friction. Obviously the time has come for co-operation, but the old dictum of Henry Adams apparently still holds good: "Politics, as a practice, whatever its professions, [has] always been the systematic organization of hatreds."[1]

A less fundamental but nevertheless important limitation on taxation lies in the field of administration. We have put our tax system to a very severe strain in view of the type of administration that we have available. In the administration of the federal income tax, for example, we have tried to make up for inefficiency by introducing harshness. As a result, we are rapidly losing taxpayer co-operation, without which the income tax cannot be successfully administered.

Next, and fifth, is a trend that may be described as the increased importance of the financial relations between governmental jurisdictions. In the last twenty years there has been a great increase of the collection of taxes by jurisdictions other than those which spend the money. In the field of public education this phenomenon has assumed the form of an impressive expansion of state aid for schools. The old, traditional type of state aid, resting on the notion that its primary function was to stimulate activity in the localities along certain desirable lines, has largely given way to the plan of equalization, based on tests of local ability and need. This new conception of state aid has swept the country, and clever techniques have been evolved that are readily adaptable to federal subventions of a similar character.

The establishment of large federal subventions for schools would certainly be in harmony with present trends. The fundamental philosophy that has controlled the movement for increased school aid by the states is valid for the federal field. It is reasonable that there should be a guaranty of a minimum educational offering to every child, no matter where he may be born. If a child happens to to be born in Arkansas, and if Arkansas is unable to supply a reasonable educational opportunity, New York and Pennsylvania should help Arkansas. We must recognize, however, that in the past

[1] *The Education of Henry Adams*, p. 7. Boston: Houghton Mifflin Co., 1918.

federal aid has been insignificant in amount and that up to this time there has existed a close link between the cost of schools and the benefits of schools by state areas. Now, how broad and generous are we after all? It is one thing for me to lay down a dime and get some specific schooling for my own son in return. It is another thing for me to lay down a dime for the benefit of a boy in one of the mountain counties of New York. It is a still different thing for me to lay down a dime for a boy in Mississippi or Arkansas. So long as our state lines define the limits of our school district, we have shown that we are willing to pay. To what extent can the area be safely enlarged? We must face the fact that there are possibilities of repercussions on the willingness of the taxpayer to be taxed and that in some of the wealthy states these repercussions may be serious.

The demand for increased federal participation in the support of education is accompanied by the specification that there shall be no federal control of educational policy. At once the interesting question arises: Can any jurisdiction take responsibility for levying the taxes for any particular purpose without sooner or later being forced to take the responsibility for defending that expenditure and without being asked to assure the taxpayers that the money is spent in a proper manner? Consequently I would speak this word of warning: if you push for federal appropriations, you should be prepared to accept some measure of federal control. In the state of New York I had something to do, some fifteen years ago, with setting up the present arrangement for distributing state aid for schools. Under that arrangement it was contemplated that there should be no increase in state control. Two years ago a special commission made a study of the manner in which the plan was operating. As I listened to the testimony before that commission and analyzed the evidence laid before it, I came to realize that the time had already come in New York when there was a strong demand that, in view of the large sums which the state was now giving to the support of education, the state department should assume a much larger degree of control over the school expenditures of the localities than it had exercised in the past. No mere audit will satisfy this demand. Sooner

or later the jurisdiction which imposes the taxes will exercise real control.

So far as you, in Pennsylvania, support this demand for federal subventions because you desire to contribute substantially toward the cost of improving the educational offering in the poorer and more backward states, there can be nothing but praise for your public spirit. It is inspiring to find this sentiment growing in states like New York and Pennsylvania. But let there be no misapprehension regarding its financial incidence. The richer states, like New York and Pennsylvania, ought to look on the proposal for federal subvention somewhat as they would look on a request to subscribe to a foreign missionary society. We shall be giving up more than we shall be getting back, and we ought to face the proposal frankly in those terms.

It was not so very long ago that Pennsylvania was numbered among the states which made meager provision for their own schools. I am delighted that you are now apparently in a position to make a large contribution to foreign missions. However, I cannot but wonder whether you are fully aware that, in any scheme which is likely to go through, you will get back substantially less than you put in. So far as support in Pennsylvania for federal subventions for common schools rests on the conviction that this aid will mean more money for Pennsylvania schools than would be otherwise forthcoming, that conviction is, in turn, based on the assumption that Pennsylvania will not tax herself nearly so heavily as she will submit to being taxed by the federal government for this particular purpose. Only part of what Pennsylvania will pay in increased federal taxes for schools can come to Pennsylvania for her schools. It may be that your technical limitations in the tax field are such that you are ready to abdicate these taxing functions to the federal government. It may be that your politicians are not brave enough to impose the taxes you want and that they prefer to shift to Washington the responsibility of imposing the taxes. In its essence this plan means that you are willing to pay a dollar and a half to get a dollar in return. From the narrow point of view of getting more money for Pennsylvania schools, the principle is unsound.

Moreover, the support for federal subventions is based on the as-

sumption that the money will be collected and distributed under an equitable and "scientific" plan. Will the conditions prove to be ideal? Are you, in Pennsylvania, convinced that an objective, non-political distribution of your money is sufficiently assured to justify your support? Will you Pennsylvania school men, who, let us say, will expect to get back a dollar at a cost of a dollar and a half to the state, be content to have the expenditure of the dollar that you receive supervised with a view to seeing that it is well spent, as judged by tests satisfactory to your sister-states? Are you Pennsylvanians content indefinitely to pay a dollar and a half to get a dollar, without assuring yourselves that your fifty cents which will be spent in Alabama or Arkansas is well spent, as judged by standards satisfactory to you? These questions I am trying to make just as specific as I can because we should clearly understand the financial import of the plan as it affects the richer states. I should like to see federal subventions moderately increased, but there is no doubt that any federal subventions will come at the expense of states like Pennsylvania and New York. Moreover, I must frankly say that to my mind the declaration of the Educational Policies Commission that the federal government should give huge sums in support of public education and yet need in no way interfere with the management or control of education or the choice of educational means, processes, and programs carried on by state and local governments is, to put it mildly, optimistic.

This survey of recent trends in the field of economics and fiscal policy reveals a situation which cannot fail to be disturbing to every thoughtful person interested in the future of school finances. The financial support of public education during the next decade will be profoundly affected by the degree of success that attends the efforts to solve certain broad political, economic, and fiscal problems. Among the significant questions are these:

1. Shall we, utilizing the general framework of capitalistic organization and the present system of economic incentives, be able to evolve a technique of helpful co-operation with business which will eliminate at least some of the waste and loss of recurrent depressions and which will, on balance, increase economic productivity? If the answer is "Yes," the foundation for school finance is secure and the

general structure of the present system of school finance will be retained, but probably with important modifications. If the answer to this question is "No," we must look forward to an extended period of radical experimentation in the economic field, with a substantial impairment of total productivity as a distinct probability and with revolutionary changes in fiscal techniques as a certainty.

2. Assuming an affirmative answer to the first question, that is, that we can work in co-operation with business, shall we succeed within the framework of the present political system in solving the budgetary problem? It is possible that the solution of this problem will involve important changes in our system of taxation—federal, state, and local—and important changes in the financial relationships among the different jurisdictional levels. It is obvious that the solution of this problem will also involve the development of an ability to follow a consistent financial plan over an extended period of time, a plan which assumes a more adult attitude than has been displayed in the recent past toward the expenditure of public money in response to the demand of special pressure groups. If the answer to the question is negative, the progressive deterioration in the state of our public finances seems inevitable. The implications of this deterioration for the financing of public education in the next decade are not pleasant to contemplate.

As we face the uncertainties of the immediate future, the school men of this state and of the nation will, I feel confident, play an important and helpful part in reaching sound solutions of our problems. Specifically, let us stand for efficiency and productivity in performing the functions assigned to us by the community. Insofar as it lies within our power to influence public policy on the momentous issues that face us, let us, of course, make sure that the financial needs of public education are adequately presented and properly weighed; let us unselfishly make our influence felt in favor of those policies which promise the most for the general welfare. In the long run, the adequate financial support of public education must rest on a sound economic policy for the country as a whole. The outlook for school finance depends on the general health of the public fisc. A good system of school taxation implies a good system of general taxation.

EDUCATIONAL PROBLEMS OF A CHANGING POPULATION[1]

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NEARLY a century ago Horace Mann expressed a deep-seated and an abiding conviction of the common man in America when he declared that, above all other devices of human origin, education is the great equalizer of the condition of men. Free opportunity for intellectual development and cultural growth has been fundamental in the American tradition in education. It has been a cardinal principle of American democracy that a free education is the birthright of every American child. As in no other nation in the world, we have opened the doors of our schools to children of every race and every creed regardless of economic status or of social class. Yet, despite all that we have done and all that we are doing, the most devastating criticism that can be directed against the American educational system is its widespread failure to provide equality of opportunity. In a country of such vast extent and of such differences in cultural patterns, absolute equality of educational opportunity is not to be expected. But the differences that exist are not slight; they are of such magnitude as to constitute a threat to the very fabric of our democratic institutions.

The inequalities of opportunity which characterize the American educational system today result primarily from the unequal distribution of the educational load, from the unequal distribution of the national income, and from the long-established tradition that the schools should be supported from local and state revenues.

UNEQUAL DISTRIBUTION OF THE EDUCATIONAL LOAD

The imbalance in the distribution of the educational task between different states and regions, and between communities of

[1] Most of the data in this article are drawn from a more extended investigation by the author soon to be published by the American Youth Commission of the American Council on Education under the title *Equal Educational Opportunity for Youth: A National Responsibility*.

different sizes, results in large measure from differentials in reproduction. The small-family pattern which has come to characterize American life appeared in southern New England somewhat more than a century ago. It spread slowly into the Middle Atlantic states and to urban communities elsewhere. The custom of family limitation is being adopted today, to a greater or less degree, by the native white farm population, by negroes living on the farm and in the city, and by the foreign-born. Continued increase in population, however, has tended to obscure the declining fertility of the American people and to mask the fact that we are moving swiftly in the direction of cessation of population growth. Already in at least ten states birth-rates are not sufficiently high to maintain the population at its present level. In such populous states as Massachusetts, New York, New Jersey, Illinois, and California, fertility is below what is required for family replacement. Indeed, for the nation as a whole the reproduction index is somewhat less than one hundred; under existing conditions of fertility and mortality, each thousand girl babies will fail to replace themselves by a thousand daughters. In balancing our population budget, we are in the red by about 4 per cent. On the basis of present trends, at some time between 1955 and 1980 population in this country will stop growing and will remain stabilized or begin to decline.[1]

Although the custom of family limitation is more or less nationwide, there are, nevertheless, striking differentials in the fertility of women in the different regions and in different types of communities. The fertility of native white women is below what is required to maintain the population at its present level by about 11 per cent in New England, 15 per cent in the Middle Atlantic states, and 28 per cent in the Pacific states. In contrast, reproduction rates are above what is required for family replacement by 7 per cent in the West North Central, 25 per cent in the South Atlantic, 41 per cent in the East South Central, 19 per cent in the West South Central, and 29 per cent in the Mountain states.[2] Obviously the popula-

[1] For estimates of future population growth see *Population Statistics:* I. National Data. Material Prepared for a Study of Population Problems by the National Resources Committee. Washington: Government Printing Office, 1937.

[2] P. K. Whelpton, "Geographic and Economic Differentials in Fertility," *Annals of the American Academy of Political and Social Science,* CLXXXVIII (November, 1936), 39.

tion reserves of the nation are being drawn in large measure from the southern states. In 1930 the southern and the southwestern states[1] contained less than a third (28 per cent) of the people of the nation, but they accounted for nearly half (47 per cent) of the total excess of births over deaths. Differences in fertility are even more striking when individual states are considered. The reproduction rate of native white women in Kentucky and West Virginia is more than twice as high as that of women of the same class in California. The population of Georgia is only slightly more than one-third as great as the population in the combined area of California, Oregon, and Washington, but Georgia accounts for about 50 per cent more of the excess of births over deaths than the combined area of the three Pacific states.

Regional differences in reproduction rates cause the child population of school age to be distributed very unequally with respect to the supporting adult population. In certain areas the economically productive age group carries a burden of child nurture and education fully twice as great as that carried by the same group in other areas. In order to discover precisely the imbalance in the distribution of the educational load, the writer prepared a map which shows for each county in the United States the number of children seven to thirteen years of age per thousand adults twenty to sixty-four years of age. The great area of low ratios of children to adults stretches from Maine to Maryland and extends westward from New York and Pennsylvania, getting broader as it reaches the Middle

[1] In some instances the sources of information employed in this investigation have made it necessary to present data according to the regional classification of the United States Census Bureau. More commonly, however, the regional classification employed has been that which was developed by Howard W. Odum in *Southern Regions of the United States* (Chapel Hill, North Carolina: University of North Carolina Press, 1936) and which was adopted by the National Resources Committee in its report on *The Problems of a Changing Population* (1938). The regions and the states comprising them are as follows: *Northeast:* Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Pennsylvania, Maryland, District of Columbia, West Virginia; *Middle:* Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri; *Northwest:* North Dakota, South Dakota, Nebraska, Kansas, Montana, Idaho, Wyoming, Colorado, Utah; *Southeast:* Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana; *Southwest:* Oklahoma, Texas, New Mexico, Arizona; *Far West:* Nevada, Washington, Oregon, California.

states and the prairies and ending in the eastern parts of South Dakota and Nebraska and the central part of Kansas. From there westward the map shows a great deal of variation until the Pacific states are reached. In Nevada and along the entire Pacific coast the number of children in relation to adults is unusually small. Low ratios also appear in parts of Florida and in a number of urban counties located in the states of the Southeast and the Southwest.

Counties of moderate ratios run together in such a way as to form fairly definite patterns. The cut-over lands of the Great Lakes, extending across northern Michigan, Wisconsin, and Minnesota, constitute one area of moderate ratios, although in this area there are some counties with very high ratios. Another area of moderate ratios skirts the southern border of the great area of low ratios. It extends from southwest Pennsylvania through southeastern Ohio, southern Indiana and Illinois, northern and western Kentucky, to southeastern Missouri. In the Southwest many counties in Oklahoma, Texas, New Mexico, and Arizona fall in the classification of moderate ratios, as do also large parts of the Great Plains area stretching from Texas northward.

The great area of high ratios of children to adults extends from Pennsylvania and Maryland southward and includes the Southern Appalachians and the old cotton belt of the Southeast. In these two regions the adult population carries a burden of young dependents out of all proportion to that carried by other sections of the country. Outside the South, counties with unusually high ratios are found in fairly large numbers in Arizona, Utah, Idaho, and North Dakota, and in smaller numbers in Michigan, Missouri, Oklahoma, and Maryland.

There are stiking differences in the educational load carried by the economically productive age group in the various regions of this country. For every 1,000 persons twenty to sixty-four years of age, there are in the Southeast 426 children of five to thirteen years of age. For the other regions the ratios are as follows: Southwest, 380; Northwest, 350; Middle states, 297; Northeast, 295; and Far West, 236. Stated in other terms, the productive workers of the Southeast carry a burden of child support and education at the elementary-school level 80 per cent greater than that carried by the

productive workers of the Far West, and about 44 per cent greater than that carried by the Northeast or the Middle states.

The school population is distributed still more unevenly among the several states than among the various regions. In South Carolina, for example, the adult population is carrying an educational load more than twice as great as that carried by the adult population of California or New York, and nearly twice as great as that of Illinois. In South Carolina, North Carolina, New Mexico, Alabama, West Virginia, and Utah, the child population in need of care and education per thousand adults is from 70 to 100 per cent greater than that in the state of New York.

The high ratios of children to adults in the southern states are not due, as might be supposed, to the excessive fertility of the negro population. In a few southern states, notably South Carolina, the ratio of negro children to negro adults is appreciably higher than the ratio of white children to white adults; but in other states, for example, Kentucky, Tennessee, and Arkansas, the reverse is true. In general, the excessive burden of young dependents in the South cannot be attributed to the high fertility of the negro population.

Natural increase in this country is taking place at widely different rates in communities of different sizes as well as in the different regions. In fact, for more than a century fertility has been much higher in agricultural than in urban communities. In 1930 the reproduction index for native white women in the total urban population was 0.86; for negro women in the urban population it was 0.72. In the rural-farm population the reproduction index rose to 1.69 for native white women and to 1.80 for negro women.[1]

Naturally such differences in fertility by size of community result in a striking imbalance in the distribution of the child population in relation to the supporting adult population. The burden of child care and education, as measured by the number of children per thousand adults, increases sharply as the size of the community decreases. In cities of a hundred thousand or more, the number of children of school age is relatively small. This statement is true of

[1] *The Problems of a Changing Population*, p. 134. Report of the Committee on Population Problems to the National Resources Committee. Washington: Government Printing Office, 1938.

children of both elementary- and secondary-school age, and it is true, too, of large cities in all sections of the country. The number of children in relation to the supporting adult group is relatively small, too, in the case of the total urban population including cities of all sizes. In every part of the United States the educational load rests relatively lightly on the urban dweller. On the other hand, in rural-non-farm communities, that is, in small towns and villages, the relative number of children is markedly greater than in the urban communities and much greater than in the larger cities. It is, however, the rural-farm population that is carrying a burden of young dependents out of all proportion to the burden carried by the population in other types of communities. Each thousand adults in the rural-farm population of the Southeast and the Southwest is carrying a burden of child care and education more than twice as great as that carried by a similar number of adults in the large cities in these sections, and in the other regions the child burden of the rural-farm population ranges from 62 to 85 per cent greater than that in the large cities.

UNEQUAL DISTRIBUTION OF INCOME

The unequal distribution of the educational load is particularly significant when considered in relation to economic resources and income levels. In making their Study of Population Redistribution, Carter Goodrich and his associates[1] applied an index of levels of living to all the counties of the United States. On the basis of this index, a map was prepared to show the plane of living for all the counties of the United States. When this map is compared with the map, previously described, showing the ratio of children to adults by counties, it is found that the two are similar in their general patterns: the correspondence of areas of high ratios of children to adults and of low economic resources is appallingly striking. Almost without exception, the greatest responsibility for child nurture and education falls heaviest on those areas with the lowest levels of living.

[1] Carter Goodrich and Others, *Migration and Economic Opportunity*, pp. 19–20. Report of the Study of Population Redistribution, Industrial Research Department, Wharton School of Finance and Commerce. Philadelphia: University of Pennsylvania Press, 1936.

Further analysis reveals that areas characterized by high fertility rates and by high ratios of children of school age to the supporting adult group are, by and large, areas in which a high percentage of the farmers are tenants. The farm population of the South has a higher fertility rate than any other group in the nation; it carries a burden of young dependents out of all proportion to that carried by any other large population group; and it is comprised predominantly of tenant farmers. In South Carolina, Georgia, Mississippi, Alabama, Louisiana, Arkansas, and Oklahoma, from 60 to 70 per cent of the farms are operated by croppers or tenants. There is, too, a close association, in general, between areas having an extremely high ratio of children to adults and areas in which the value of products per farm is unusually low. Farms reporting total value of products under a thousand dollars annually are located predominantly in the Appalachian-Ozark region, in the eastern and western cotton belts, and in the cut-over lands of the Great Lakes—all areas of high population fertility and heavy educational loads.

The Federal Emergency Relief Administration has delimited, primarily through a study of relief, the main rural problem areas of the United States.[1] Three of these are in the South: the Appalachian-Ozark region, the eastern cotton area, and the western cotton area. The cut-over lands of the Great Lakes states and the northern and the southern portions of the Great Plains constitute the other three problem areas. These areas, considered as a unit, are characterized by the highest birth-rates of any region of comparable size in the United States, by an excessive population pressure on the resource structure, by exceedingly low income per farm, by high rates of farm tenancy, by low levels of living, and by the large percentage of the population unable to carry their own economic weight during periods of economic stress.

An analysis of the educational load of the six rural problem areas reveals that the adult population has a burden of child support and education much greater than that of any comparable population group in the nation. For each 1,000 adults in the economically pro-

[1] P. G. Beck and M. C. Forster, *Six Rural Problem Areas*. Research Monograph, I. Washington: Division of Research, Statistics, and Finance, Federal Emergency Relief Administration, 1935.

ductive age group in the problem areas considered as a whole, there are 340 children of seven to thirteen years of age. In the nation as a whole, exclusive of the problem areas, the number of children per 1,000 adults is 231. Outside the problem areas there are in the United States 185 important industrial counties. In these industrial counties, the ratio of children to adults is 210, as compared with a ratio of 340 in the problem areas. In northeastern cities of 100,000 or more, the number of children per 1,000 adults is only 198.

A comparison of the relative number of children living in these problem areas with the number living in certain other regions reveals the importance of the educational task in these areas of restricted economic opportunity. Twenty-five per cent of the nation's children of elementary-school age live in the problem areas, 28 per cent live in the nonproblem areas of the Northeast, 24 per cent in the nonproblem areas of the Middle states, and 5 per cent in the Far West.

A comparison of the distribution of children and of income between the farm and the non-farm population tells a similar story of differences and inequalities. The responsibility for the care and education of 31 per cent of the nation's children of school age falls on the farm population, but farmers receive only 9 per cent of the total national income.[1] In every region in the United States, except the Far West, the farm population has a percentage of the nation's children far in excess of its percentage of the national income. It is, however, in the farm population in the states of the Southeast that the disparity between the child population and income assumes startling proportions. The farm population of the Southeast has 13 per cent of the nation's children of school age, but it receives only 2 per cent of the national income. In contrast, the non-farm population of the Northeast has 27 per cent of the nation's children of school age, but it receives 42 per cent of the national income. In the farm population of the entire South there are 17 per cent of the

[1] The population figures are those of 1930. The income estimates used throughout this article are those of the Brookings Institution. See Maurice Leven, Harold G. Moulton, and Clark Warburton, *America's Capacity To Consume*, pp. 172–73. Washington: Brookings Institution, 1934.

nation's children of school age. In the division of the national income, however, southern farmers receive only 3 per cent.

RESULTS OF UNEQUAL DISTRIBUTIONS OF LOAD AND INCOME

Such differences in the child load in relation to the supporting adult group and such disparities in levels of living and income necessarily reflect themselves in regional and community differences in school efficiency and cultural opportunity. On practically every measure of cultural resources or of cultural-intellectual status, and on nearly every measure of educational efficiency, areas having a disproportionately heavy burden of child care and receiving a disproportionately small part of the national income fall markedly below the national norm.

Inequalities of educational opportunity in this country constitute a challenge to American statesmanship. For millions of children the opportunity for anything more than a modicum of meager, formal education is largely conditioned by place of birth. In communities where fertility is too low for family replacement, where the burden of child care and education is light, where economic resources are most abundant, and where the cultural-intellectual status of parents is high, we support education liberally. In communities where the birth-rate is high and the supporting adult group is carrying a disproportionately heavy child population, where income per child is far below the national norm, where the level of living is low, where the cultural heritage is the poorest, where the home has least to contribute to cultural and intellectual growth, we support education niggardly. Education can be made a force to equalize the conditions of men; it is no less true that it can be made a force to create class, race, and sectional distinctions. The evidence indicates clearly that, if we pursue our present policies, there is grave danger that our schools, which we have hitherto regarded as the bulwark of democracy, may in fact become an instrument for creating those very inequalities that they were designed to prevent. If for a long period of years we draw each succeeding generation in disproportionately large numbers from those areas in which economic conditions are poorest and the cultural-intellectual level is the lowest, if the population reserves of the nation are to be recruited from a definitely

underprivileged class, and if we fail to make good the deficit by conscious educative endeavor, the effect on our culture and on our representative political institutions may be appalling.

IMPORTANCE OF MIGRATION

Inequality of educational opportunity in this country assumes serious proportions when considered in relation to internal migration. At the taking of the last census nearly a fourth of the native population was living in states other than the state of their birth. One-fourth of the states had given up to others more than a third of the population born within their borders. This reshuffling of the population has been dominated by the movement of young people from farm to city in search of economic opportunity. During the 1920's the total net migration of the rural-farm population amounted to over six million persons. Despite its high rate of natural increase, the total farm population actually decreased by more than a million.[1]

Moreover, the poorest agricultural areas throughout the nation were those from which redundant population was drawn off in greatest volume to industrial and commercial communities. The rural-farm population of the South dominated the movement from farm to city during the decade of the twenties. About 60 per cent of the net migration from farms during this decade was from farms located south of the Mason-Dixon line.[2] The areas from which the cities drew population in such large volume were areas characterized by high rates of farm tenancy. It is a fact of no slight significance that approximately two-fifths of the net migration from farms was in those states, all in the South, in which more than half of the farms were operated by tenants.

From the trends in reproduction and migration it appears, furthermore, that southern farmers may be expected to constitute the chief source of future population increase. The reproduction rate of the urban population is materially below what is required for per-

[1] O. E. Baker, "Rural and Urban Distribution of the Population in the United States," *Annals of the American Academy of Political and Social Science*, CLXXXVIII (November, 1936), 264.

[2] *Idem.*

manent maintenance; if American cities are to grow or even to maintain their population at the present level, they must look to the rural population as a source of recruitment. The farm population, with a reproduction index twice as great as that of the larger cities, will be able to send forth a constant stream of migrants to make good, at least in part, the deficits of the cities. The surplus farm population, if one may judge from present trends, will be supplied chiefly from the southern states. At present, natural increase in the farm population, as measured by excess of births over deaths, is taking place predominantly in the South. For the five-year period 1930–34 the excess of births over deaths in the farm population of the single state of North Carolina was greater than that of the farm population of New England, the Middle Atlantic states, and Ohio, Indiana, and Illinois combined.[1] Eight southern states accounted for more than half the natural increase of the nation's farm population. As O. E. Baker has pointed out, the South as a whole supplied more than two-thirds of the excess of births over deaths in the nation's total farm population, while the West and the North combined supplied less than one-third. These facts take on added social meaning when it is recalled that more than half the southern farms are operated by tenants.

It is of no slight importance that the youth who are being provided the most restricted educational facilities are those who, in largest numbers, will find it necessary to seek occupational opportunity outside the communities of their birth. Under the most favorable conditions the successful transplanting of an individual from one cultural pattern to another requires a high degree of adjustment and adaptability. Youth who have been denied the opportunity of anything more than the most restricted intellectual growth in the home, in the community, and in school will, no doubt, find the venture particularly hazardous.

NEED OF MODIFICATION IN TRADITIONAL METHODS OF SCHOOL SUPPORT

Education in this country can no longer be regarded as exclusively, or even essentially, of local concern. With the degree of migration

[1] *Ibid.*, p. 268.

that is sure to characterize the American population in the future, the cultural and intellectual level of any region necessarily becomes a matter of deep concern to the people of every other region. No state or region having regard for its own safety or welfare can be indifferent to the educational opportunities afforded youth in those regions from which it will, in large measure, draw its future citizens.

The maintenance of schools in this country has commonly been regarded as solely a matter of local or state concern. It is still frequently asserted that the failure of many of the states to provide adequate educational opportunities is due to lack of interest and effort. A critical analysis of the evidence indicates that such is not the case. There is, in general, no significant relation between the adequacy of financial support for education in different states, as measured by expenditure for education per child of school age, and financial effort, as measured by the ratio of total expenditure for education to total tax resources. Similarly, there is no significant relation between effort and ability. The only significant relation is between ability and adequacy.

The striking differences in the ability of the states to support education may be brought out in another way. Professor Newcomer,[1] an experienced tax economist, has worked out a tax plan as ideal as in her judgment can be devised. If this plan were put into effect in the poorer states, they would still be unable to support their schools adequately. In eight of the southern states it would require all, or more than all, the taxes that could be raised under such a plan to provide an amount per child of school age equal to the national average expenditure per child of school age. South Carolina would have to spend 191 per cent of its total tax revenue in order to provide $58 per child of school age, the amount which was the national average expenditure per child in 1930.

In practical operation, the principle of local support results in inequalities of educational opportunity which at present cannot be avoided. In most states failure to support an adequate program of

[1] *Federal Support for Public Education*, pp. 115–78. A Report of an Investigation of Educational Need and Relative Ability of States To Support Education as They Bear on Federal Aid to Education made under the direction of Paul R. Mort and under the auspices of the Columbia University Council for Research in the Social Sciences. New York: Teachers College, Columbia University, 1936.

education is due primarily to lack of taxable resources. The states ranking lowest in adequacy of financial support of education are, in general, the states which put forth the greatest effort. There may be reasons why the federal government should not participate in the support of education in the states, but these reasons should be weighed against the certainty that, if the states are left to their own resources, the existing inequalities of educational opportunity will be perpetuated for a generation, if not indefinitely.

Differentials in reproduction as between regions, types of communities, and social classes, and the consequent imbalance in the distribution of the burden of child care and education raise fundamental problems of social and educational policy. In general, the people who have the highest occupational status and who enjoy the richest cultural resources are failing to replace themselves from one generation to another. In contrast, the underprivileged elements in American life, the mountain folk of the Appalachian region, the southern farmers, farmers on marginal and submarginal lands, and the unskilled-labor groups in the great urban centers supply the chief source of population increase. Here is a situation fraught with profound consequences for the future of this country. We do not at present have evidence to indicate, with precision, the effect on our social heritage of the disproportionate spread of inferior cultural patterns which tends to result from differentials in fertility. This we do know: the home environment, including the cultural-intellectual status of parents, is a strong force in the intellectual and cultural growth of the child, and the cultural-intellectual status tends to perpetuate itself from one generation to another. Certain it is that the disproportionate spread of inferior cultural heritage increases in large degree the social obligations of institutionalized education. In some manner the school must make good the deficit of the home and of the community. So far we have paid little heed to this important fact. We have pursued a policy of providing the richest educational opportunity for those who need it least, for those boys and girls into whose future homes not enough children will be born to replace the family; to those boys and girls who will in large measure assume the responsibility of supplying the population reserves of the nation, we have denied equality of educational oppor-

tunity. Clearly such a situation calls for a rethinking of our national educational policy.

Finally, it may be pointed out that for some decades the future voters of this country will come in disproportionately large numbers from the underprivileged elements in American life, from southern white and negro tenant farmers, from farmers living on marginal and submarginal lands, from unskilled labor in the great cities. One may well ask: What attitude toward economic, social, and political policies will these sons and daughters of farmers and laborers take? Will they support the capitalistic system? Will they insist on an extension of the authority of government? If so, what form of government will they approve? Will they swing to the right or to the left, or will they pursue the middle way? To such questions as these the future holds the answers, and the answers may in part be determined by what takes place in American schools and by the policy of the federal government with respect to the education of its citizens.

AN INVESTIGATION OF CHILDREN'S PREFERENCES FOR MODERN PICTURES

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WITH the new programs of work in the elementary school there has come an increasing emphasis on the importance of developing early in the child's life an awareness and an appreciation of things beautiful. Art is a part of the elementary-school program because it helps children to develop creative ability, to satisfy needs for beauty, and to appreciate all art and the finer things of life (9: 444).

Picture appreciation is recognized as a legitimate part of the art-appreciation program in the elementary school by writers in the field (4: 369) and by the inclusion in many courses of study of suggested lists of pictures for use in the appreciation program (8: 7–10). Pictures interest children. Pupils see pictures in books and magazines and elsewhere in their environment. The present is a picture age, and children seem to be interested in the art expression of the present (1: 66–81). Since modern pictures are a part of the child's environment in and out of school, the writers were interested in learning whether children would have any particular preferences for individual pictures in a group of accepted and outstanding modern paintings in which the elements of modern art work could be seen at their best.

The purpose of the study was to discover what modern pictures children in the elementary school like and the reasons for their choices. Most courses of study do not include, in suggested lists of pictures for teaching appreciation, pictures of the modern type. Among those which do include such pictures, there is little agreement as to subject matter, artist, or what is interesting to the

child. Knowledge of the types of pictures that children prefer at various age levels will give a basis for the development of appreciation (4: 369). It was thus felt that an investigation of children's preferences from among a group of accepted modern pictures might be of value in making a selection of modern pictures which children would like and which would be useful in picture appreciation.

The study was delimited to an investigation of what pictures children liked, and the reason or reasons for their selection, when presented with a group of eighteen selected modern pictures. The study was further delimited by including children of the intermediate grades only. It was felt that the intermediate level would be the most satisfactory so far as ability to give written replies was concerned. The background of experience and artistic appreciation of intermediate-grade children is also wider than that of lower-grade children (2: 132).

METHOD OF THE INVESTIGATION

Selection of pictures.—The eighteen modern pictures used in this investigation, which are listed in Table 1, were selected by a group of competent judges as typical of modern painting. An art supervisor, an art collector, and an art teacher were the judges of the pictures. The pictures were selected solely on the basis of being good examples of modern paintings. They are representative examples of each artist's work. The best obtainable prints were purchased, and all were of the same quality and of approximately the same size. All the prints were colored reproductions of the originals. The eighteen prints were arranged and numbered from one to eighteen and were placed on two large, white cardboard sheets in order that they could be easily shown before the classes. The following questionnaire was used to obtain the desired information.

PICTURE QUESTIONNAIRE

Name .....Grade .....Boy or Girl .....
School .....City .....Age .....
The picture I like best is number ..... Have you ever seen it before?
Yes or *No* .....
Why do you like it best? .....
The picture I like second best is number .....
The picture I like third best is number .....

After the questionnaires had been distributed, the following directions were read.

Boys and girls, I am going to show you some pictures. I want you to look at them very carefully. Each picture will be numbered at the top. Write down on this line [holding up paper and indicating first line] the number of the one you like best of all. Tell whether you have ever seen it before and why you like it [indicating proper space on a sample questionnaire for each direction]. Write also your second and third choices if you wish. Do not talk to anyone about the pictures, and do not let anyone see your paper. Turn your papers over when you are through.

The display charts were then set up, and the children made their selections. No time limit was set, but they generally completed the test in fifteen or twenty minutes. In a few cases the children asked for individual help in spelling a word. Spelling was the only difficulty that they encountered in filling out the questionnaire. They showed a great amount of interest and enthusiasm in taking the test. Generally a discussion of likes and dislikes was held after the showing.

Schools used in the study.—Each of the schools used in obtaining the data for this study differed in the type of children attending. The children in one school came from homes with many advantages. The occupations of the parents of these children ranged from the professions to the business executive and office worker. The second school was in the industrial area of the city. The parents were largely foreign born, and they worked as factory workers, cannery workers, or day laborers. The third school had a school population which drew from the laboring class, the industrial-occupations group, and a farming group. It may be seen that the schools covered a wide range of social groups. The children in these schools had had no instruction in picture appreciation by a trained art teacher. Their reactions to these modern pictures would thus be relatively uninfluenced by any training in picture appreciation.

Subjects used in the study.—The data from 436 children's papers were collected to give the results presented in this investigation. Four hundred and thirty-six first choices were made by the children, but not all pupils made second and third choices. However, a satisfactory return was received. Out of a total of 1,308 possible choices, the children made 1,279, approximately 98 per cent of the

possible total. The sixth-grade children made 99 per cent of the total possible choices; the fifth-grade children, 97 per cent of the total possible choices; and the fourth-grade children, 94 per cent of the total possible choices. Since the numbers of children in all grades were practically the same, grade comparisons were possible. The children, on the average, were approximately nine, ten, and eleven years of age.

TABLE 1

PICTURES DISPLAYED, NUMBERS ASSIGNED PICTURES ON DISPLAY CHART, AND NUMBER OF CHILDREN IN GRADES IV, V, AND VI WHO NAMED EACH PICTURE AS FIRST CHOICE

Name of Picture	Display Number	Artist	Number of Choices (436 Possible)
1. Lake through the Locusts	9	Lucioni	109
2. New England Harbor	11	Reindel	64
3. On the River	5	Rousseau	64
4. The Artist's Room	6	van Gogh	36
5. The Stockade	18	Cézanne	31
6. Still Life: Fruit	16	Cézanne	26
7. Venice	10	Signac	19
8. On Horseback at the Seaside	14	Gauguin	15
9. Chestnuts	15	van Gogh	15
10. The Almond Spray	8	van Gogh	11
11. In the Garden	1	Pissaro	10
12. Ballet in the Open	4	Degas	9
13. Blue Window	17	Matisse	8
14. Self-Portrait	3	van Gogh	6
15. The Smoker	12	Cézanne	5
16. The Blue Vase	2	Cézanne	4
17. The Zouave	13	van Gogh	3
18. View from the Studio	7	Picasso	1

RESULTS OF THE INVESTIGATION

Preferences for pictures.—The data presented in Table 1 give the first choices of the 436 children. The picture receiving the greatest number of votes was ranked first and so on down to rank 18. Analyzing the first choices of the children as shown in Table 1, the writers found that three pictures received the majority of the votes. In order, these were "Lake through the Locusts," "New England Harbor," and "On the River." The first, "Lake through the Locusts" received forty-five more votes than either the second or the third. "Lake through the Locusts" and "New England Harbor" were

painted by Americans. Both represent a phase of photographic realism. The term "realism" connotes the ability to reproduce a subject as accurately as possible; in other words, to make it true to life. All three pictures are outdoor scenes. "On the River" is an extremely simple and almost childlike picture. Each of these three pictures is the work of a different artist. On the whole, individual pictures in the study appealed to children rather than the pictures of any one artist.

Among the lower ranking pictures were portraits and such pictures as "Blue Window," "Venice," and "View from the Studio," the last named receiving only one vote of the total 436. A still-life painting, "The Almond Spray," which in subject matter and arrangement closely resembles the things that children are often asked to draw or paint, also ranked low in the children's preferences. There was just one example of an animal picture in the group, "On Horseback at the Seaside." The children showed little interest in the picture.

The second, the third, and the total of all choices were also tabulated, and the same three pictures which achieved first, second, and third ranking as first choices again received the first three ranking places. Thus there was general agreement among first, second, and third choices.

Comparison of choices by grade.—The first ranking picture in all three grades was "Lake through the Locusts." "On the River," having a quality which might appeal to younger children, ranked second in Grade IV. "New England Harbor" was the second choice of Grades V and VI. The first three choices of Grades V and VI agreed with the total of the children's first choices as shown in Table 1. A comparison of the grade choices showed that the highest ranking pictures in each grade were those which were realistic and which made use of clear, bright colors. This result seemed to conform to Nyquist's viewpoint (10: 137). In each grade modern portraiture ranked low. The very impressionistic picture, "View from the Studio," received no votes in either Grade IV or VI and only one vote in Grade V.

The rank difference formula of correlation was applied to the ranking of the pictures by the three grades. The correlation between the

choices of the children in Grades IV and V was .87 ± .049; between Grades V and VI, .77 ± .067; and between Grades IV and VI, .80 ± .059. These positive correlations indicate a substantial agreement in the choices of the children in these three grades. So far as the data on the grade choices show, children in the intermediate grades tend to like the same modern pictures. In the case of classical pictures, intermediate grades show the same tendency (13).

Comparison of choices in the three schools.—Since the schools used in this study draw their school populations from varied social groups, the picture preferences of the children in each school were tabulated separately for the purpose of determining any differences in picture preferences which might exist among the schools. The picture chosen as outstanding in both the schools in the industrial sections of the city was "On the River." The four top ranking pictures in each of the three schools again included those which were ranked at or near the top in the first, second, and third choices of all the children of all the schools.

In the first nine ranking pictures there was agreement in the schools on the choice of six pictures: "Lake through the Locusts," "New England Harbor," "On the River," "The Stockade," "The Artist's Room," and "Venice." Again it is significant that all the modern portraits ranked below the first eleven ranking pictures. Pictures of the impressionistic type, "View from the Studio" and "Blue Window," also ranked low. This ranking was in agreement with the data on the individual first, second, and third choices of the children.

The correlations between the children's choices in the three schools were all substantially positive and seem to indicate that home background and locality have little effect on children's choices of modern pictures so far as determinable by a test of this kind.

Comparison of boys' and girls' choices.—The number of boys and the number of girls tested were nearly equal. Eighteen more boys than girls took the test. Since the groups were fairly equal in size, a comparison between boys' and girls' choices was possible.

Table 2 indicates that the boys favored "New England Harbor," with its clear delineation of boats. Approximately three times as many boys as girls chose the picture. Their reasons for the choice

were such as these: "I draw lots of pictures of boats when I go down to the wharf in San Francisco, and this picture looks just like the ships down at the wharf." "It tells a story of the sea and ships."

TABLE 2

COMPARISON OF BOYS' AND GIRLS' CHOICES OF PICTURES

Title of Picture	Number of Times Chosen		Difference in Number of Choices
	Boys	Girls	
Pictures chosen more often by boys:			
New England Harbor	129	38	91
The Stockade	92	43	49
On Horseback at the Seaside	43	15	28
The Smoker	20	8	12
Self-Portrait	13	6	7
Lake through the Locusts	112	105	7
The Zouave	9	5	4
Venice	31	28	3
View from the Studio	5	3	2
Total	454	251	203
Pictures chosen more often by girls:			
The Almond Spray	7	27	20
Blue Window	8	28	20
Ballet in the Open	5	22	17
Still Life: Fruit	25	40	15
On the River	93	103	10
The Artist's Room	37	45	8
In the Garden	20	28	8
The Blue Vase	9	13	4
Chestnuts	31	32	1
Total	235	338	103

"The Stockade," another picture of the sea, was chosen approximately two times as often by the boys as by the girls. It can be seen from Table 2 that the first three choices of the boys have to do with pictures of the sea and that the excess of their choices over those of the girls indicates the preference that boys have for this type of picture. Morrison found that boys of the primary grades also prefer pictures of the sea (8: 41). In choosing portraits, the boys showed a slight preference over the girls. The girls preferred the still-life pictures and the pictures of room interiors, such as "The Artist's

Room" and "Blue Window." In general, pictures expressing quiet and serenity were favored by girls.

There was a positive correlation of .76 ± .070 between the choices of the two sexes. This coefficient would seem to indicate that, as groups, boys and girls tend to like the same pictures.

Children's reasons for their first choices.—The reasons that the children wrote down for their first choices were classified according to their frequency of mention. These are tabulated in Table 3.

TABLE 3

CHILDREN'S REASONS FOR THEIR FIRST CHOICES AND NUMBER OF TIMES EACH REASON WAS MENTIONED

Reason Given for Picture Chosen	Frequency of Mention			
	Grade IV	Grade V	Grade VI	Total
Colors	50	45	51	146
Favorable adjectives	60	21	32	113
Individual interests	33	41	36	110
Realism	14	25	22	61
Way the picture is made	12	18	6	36
Reminiscent of familiar things	5	10	11	26
Nature	12	7	2	21
Perspective and proportion	4	5	9	18
Scenery	2	11	5	18
Background	4	7	6	17
Tells a story	.....	1	5	6
Action	2	2	2	6
Total	198	193	187	578

Most of the children responded with a number of reasons for their choices, and each choice received a check in the tabulation. Hence the total number of reasons given in Table 3 exceeds the total possible number of first choices shown in Table 1. All spelling and punctuation were corrected in the children's comments, but nothing else was altered. The favorable adjectives used most often by the children were "good," "pretty," "nice," "interesting," "beautiful," "lovely," "best" ("the best one"), and "simple" ("it is a simple picture").

The children were expressive in describing their liking for color or the artist's use of color. Such comments as the following were

common: "The colors are well chosen and blend well ['The Zouave']"; "I like bright colors and good arrangements in pictures ['View from the Studio']." Generally the children spoke of one particular color in the picture or simply referred to the "color of the picture." Color is an important element in modern pictures; it seems that the children recognized and liked this factor, as is evidenced by the frequency of their comments.

The individual interests of the children were many and varied. Flowers, boats, food, furniture, trees, horses—all called forth responses. The comments regarding the portraits, when these were chosen by the children, had to do with the facial expressions of the persons portrayed or what the children imagined the person in a picture was thinking: "I like faces that show expression ['Self-Portrait']."

Realism was noted by the children and was often mentioned. The interest that the children showed in realistic pictures agrees with the findings of Lark-Horovitz (6) and of Mellinger (7). Typical comments regarding realism were as follows: "The fruit in Number 16 ['Still Life: Fruit'] looks so real you could eat it and almost smell it"; "The grass in Number 15 ['Chestnuts'] looks real, the trees look real, and the scenery back of the trees looks real."

The children recognized "the way the picture is made" in their comments: "I like the way the picture is put together ['On the River']"; "I like the way the artist made the picture, and the way the man's coat is trimmed ['The Zouave']."

Those pictures which suggested familiar things were characterized as follows: "It makes me think about Spain where I used to live ['The Stockade']"; "It reminds me of an old-fashioned picture I saw once ['Ballet in the Open']."

Those children who gave nature as the reason for their first choice generally referred to it in some manner, for example: "I like the beauty of out-of-doors ['Lake through the Locusts']"; "I like to walk out in the fields and look at the sea ['The Stockade']."

In regard to the background of the picture, the children's comments were of this type: "I like boats, and the background the artist used is good ['New England Harbor']"; "Its frontground is good, but its background is better ['Lake through the Locusts']."

In giving scenery as a reason for the choice of a picture, the children were generally direct in their replies, using the word "scenery" with some descriptive adjective. The same may be said of the story element in a picture; the children used the word "story" in giving their reasons. Few children mentioned story interest.

In speaking of proportion, the children did not usually refer to it as proportion but were indirect in stating their reasons: "The picture is balanced right; the light and dark are in the right places ['New England Harbor']"; "The picture has repeated colors, good scenery, is not crowded, has space, and it is drawn in proportion ['Lake through the Locusts']."

Action was simply referred to as "action" and was mentioned by only six children. In general, the comments of the children were simple, vivid, and surprisingly thoughtful. They give a further insight into children's choices of pictures.

Only about 7 per cent of the 436 children had ever seen any of their first-choice pictures before. This small percentage might be expected since few children have opportunities to see the kinds of paintings used in this study.

SUMMARY AND CONCLUSIONS

The following summary and conclusions are offered as a result of this investigation: (1) Care should be taken in selecting modern pictures for picture-appreciation lists for children. (2) The majority of the children in this study tended to have definite preferences for certain modern pictures. (3) "Lake through the Locusts" received the greatest number of first choices, as well as the greatest number of first, second, and third choices. (4) The four pictures which the children ranked highest in the total choices would probably interest children in the intermediate grades and be suitable for teaching picture appreciation. (5) Children of Grades IV, V, and VI differed but little in their picture preferences. This finding is in agreement with the study of Williams (13). (6) The children showed no particular preference for any one artist's work. Each of the three or four pictures receiving the majority of choices was painted by a different artist. (7) So far as the data of this study show, the environmental status and the locality in which children live seem to have little to

do with the pictures that children choose. (8) In general, the tendency was for boys and girls to like the same pictures. Boys showed a slight preference for pictures of the sea. Although modern portraits ranked low in the total choices of all children, boys cared more for this type than did the girls. Girls, on the other hand, preferred the still-life pictures and the room interiors. Compilers of picture lists should take into account both boys' and girls' interests. (9) The majority of the children gave the following reasons for liking their first-choice pictures (the reasons are ranked according to frequency of mention): (*a*) the artist's use of color (this finding is in agreement with the studies of Lark-Horovitz [6] and Mellinger [7]); (*b*) a quality expressed by a favorable adjective of description (this finding is in agreement with Morrison's study [8]); (*c*) individual interests of the children; (*d*) realism (this finding agrees with the findings of Lark-Horovitz [6] and Mellinger [7]); (*e*) the way the picture was made. (10) Those elements which seemed to interest children the least, according to their rankings, were story interest and action.

Bibliography

1. Allen, Mary Cecil. *Painters of the Modern Mind.* New York: W. W. Norton & Co., 1929.
2. Bamberger, Florence Eilan. *The Effect of the Physical Make-up of a Book upon Children's Selection.* Johns Hopkins University Studies in Education, No. 4. Baltimore: Johns Hopkins Press, 1922.
3. Gale, Ann Van Nice. *Children's Preferences for Colors, Color Combinations, and Color Arrangements.* Chicago: University of Chicago Press, 1933.
4. Gray, William Henry. *Psychology of Elementary School Subjects.* New York: Prentice-Hall, Inc., 1938.
5. Hildreth, Gertrude H. "Color and Picture Choices of Young Children," *Pedagogical Seminary and Journal of Genetic Psychology*, XLIX (December, 1936), 427–35.
6. Lark-Horovitz, Betty. "On Art Appreciation of Children: I. Preference of Picture Subjects in General," *Journal of Educational Research*, XXXI (October, 1937), 118–37.
7. Mellinger, Bonnie E. *Children's Interests in Pictures.* Teachers College Contributions to Education, No. 516. New York: Teachers College, Columbia University, 1932.

8. MORRISON, JEANETTE GERTRUDE. *Children's Preferences for Pictures Commonly Used in Art Appreciation Courses.* Chicago: University of Chicago Press, 1935.

9. NORTON, JOHN K., and NORTON, MARGARET ALLTUCKER. *Foundations of Curriculum Building.* Boston: Ginn & Co., 1936.

10. NYQUIST, FREDRIK VICKSTRÖM. *Art Education in Elementary Schools.* Baltimore: Warwick & York, Inc., 1929.

11. PIERCE, ANNE E., and HILPERT, ROBERT S. *Instruction in Music and Art.* National Survey of Secondary Education Monograph No. 25. United States Office of Education Bulletin No. 17, 1932.

12. WAYMACK, EUNICE HAMMER, and HENDRICKSON, GORDON. "Children's Reactions as a Basis for Teaching Picture Appreciation," *Elementary School Journal,* XXXIII (December, 1932), 268–76.

13. WILLIAMS, FLORENCE. "An Investigation of Children's Preferences for Pictures," *Elementary School Journal,* XXV (October, 1924), 119–26.

INTELLIGENCE TESTING IN THE FIRST GRADE

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THE time of the year when group intelligence tests are administered has been recognized by some persons using these tests as an important conditioning factor determining, to some degree, the test result itself. Especially is this factor operative in the initial grade when the child comes to school for the first time. To what degree or extent a child's performance will vary if he is given the test in the first, the second, or the third month of school has not been, and perhaps cannot be, established. It is agreed, however, that there are many variable factors, such as a pupil's habits of application and perseverance, his ability to meet a new person or a new situation, and his ability to work as a member of a group, any or all of which may influence the performance of an individual pupil to such a degree that the end result—the mental age or intelligence quotient—may not be the true index of the child's capacity or degree of brightness. Many of these variables are lessened or improved as the child learns to adjust himself to school living. This adjustment, in turn, influences test performance and hence the measure of the child's "ability."

In a city-wide testing program carried out in Brockton in February, 1938, the Pintner-Cunningham Primary Mental Test was given to all first-grade pupils, 804 in number. These pupils had entered school in September, 1937. In September, 1938, the same intelligence test was administered to the new first-grade pupils by the same testers, the supervisor of the primary grades and the school psychologist. For certain experimental reasons this test was given in the latter part of September, almost four weeks after the opening of school. As a coincidence, the number of pupils tested was also 804.

The results of the two tests are given in Table 1. As the city median has remained relatively constant, the wide variance in test results of the two first grades points to several conclusions:

1. Since an intelligence test measures performance only, any factors conditioning performance will influence the ability score obtained.

2. Performance on a group test yields a measure of ability which is valid only for that particular test and that particular time. Given another test or another time, the ability score may vary to a large degree.

TABLE 1

INTELLIGENCE QUOTIENTS OF 804 FIRST-GRADE PUPILS TESTED IN FEBRUARY AND OF 804 FIRST-GRADE PUPILS TESTED IN SEPTEMBER, GROUPED ACCORDING TO PERCENTILE RANK

Percentile Rank	Intelligence Quotient	
	In February 1938	In September 1938
99	139	131
90	125	112
80	119	106
70	113	100
60	109	97
50	104	93
40	100	90
30	95	86
20	90	82
10	85	76
5	79	70

3. A delay in administering a group intelligence test may artificially yield higher results, inasmuch as certain conditioning factors may undergo improvement, which, in turn, will improve performance on the test and raise the test score.

4. Standardization of intelligence tests in the first grade may well include a standardization of the time element to show classroom experience.

5. Test results interpreted in terms of percentile rank, showing relative position in a group according to performance on a given test, is perhaps the most valid and reliable measure for use in the first grade.

SELECTED REFERENCES FROM THE LITERATURE ON EXCEPTIONAL CHILDREN

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THE references in the following bibliography from the literature on exceptional children are classified as follows: publications concerned with (1) subnormal and backward children, (2) behavior and problem cases, (3) juvenile delinquency, (4) superior and gifted children, (5) blind and partially seeing children, (6) crippled children, (7) deaf and hard-of-hearing children, (8) delicate children, (9) speech defectives, and (10) general references. The references in the first four of these classifications were compiled and annotated by Dr. Hildreth; those in the remaining classifications, by Dr. Ingram.

SUBNORMAL AND BACKWARD CHILDREN[1]

229. BEER, ETHEL S. "Special Training for Subnormal Children," *Journal of Abnormal and Social Psychology*, XXXII (October–December, 1937), 382–91.

Describes the program and the practices carried on at the Montgomery School for mentally retarded children in the Newark (New Jersey) public schools

230. CORRE, MARY P. "An Adjusted Curriculum for the Dull-normal Pupil," *Occupations*, XVII (October, 1938), 34–39.

The author summarizes curriculum programs that have been organized in ten large cities of the country for dull-normal children.

231. DAYTON, NEIL A. "Height, Weight, and Intelligence Relationships in 31,939 Retarded Children Examined by Fifteen Massachusetts Traveling School Clinics, 1921–1932," *Proceedings and Addresses of the Sixty-first Annual Session of the American Association on Mental Deficiency*, Vol. XLII, No. 2 (1937), pp. 84–100.

[1] See also Item 358 (Hill) in the list of selected references appearing in the May, 1938, number of the *School Review*, Item 381 (Featherstone) in the September, 1938, number of the *Elementary School Journal*, and Item 444 (Hegge) in the October, 1938, number of the *Elementary School Journal*.

Reports the relations of height, weight, and intelligence in normal, retarded, and mentally defective school children.

232. DOLL, EDGAR A., and LONGWELL, S. GERALDINE. "Social Competence of the Feeble-minded under Extra-institutional Care," *Psychiatric Quarterly*, XI (July, 1937), 450–64.

The recommendation is made that communities develop programs to provide for supervision of the feeble-minded who are not institutionalized.

233. ERICKSON, MILTON H. " 'Arrested' Mental Development," *Medical Record* (New York), CXLVI (October 20, 1937), 352–54.

A description of two clinical cases of "arrested mental development" for whom cumulative test records are available for six years or more.

234. FLETCHER, BASIL A. "The Backward Child and the Teacher," *Understanding the Child*, VI (October, 1937), 18–22, 32.

The author discusses the causes which contribute to backwardness under three general headings: physical, intellectual, and emotional. Recommendations are made for meeting the problems presented by these children in the public school.

235. HECKER, ARTHUR O. "Low Intelligence: An Investigation of 501 Consecutive Admissions to Polk State School," *Proceedings and Addresses of the Sixty-first Annual Session of the American Association on Mental Deficiency*, Vol. XLII, No. 2 (1937), pp. 181–90.

Summarizes facts relating to age of admission, social and mental status, heredity, etiology, and physical defects of the population in a large typical state school for mental defectives.

236. HUMPHREYS, EDWARD J., WATTS, GEORGE W. T., and BOLDT, WALDEMAR H. "An Investigation into the Case Records of One Thousand High Grade Mentally or Developmentally Defective Children," *Proceedings and Addresses of the Sixty-first Annual Session of the American Association on Mental Deficiency*, Vol. XLII, No. 2 (1937), pp. 9–46.

Data from case records for feeble-minded cases in a state institution are tabulated and summarized. The data relate to physical, mental, educational, economic, and social factors in each case. Describes problems presented by high-grade mental defectives in the community.

237. INGRAM, CHRISTINE P. "Opportunity for the Slow-learning Child," *Educational Method*, XVII (May, 1938), 409–16.

Emphasizes the school's responsibility for children whose intelligence quotients are between 50 and 75 and who at sixteen years of age have not advanced beyond Grade IV or V.

238. KUENZEL, MYRA W. "Family Care and Training of Feeble-minded Children under Supervision of a Children's Agency," *Training School Bulletin*, XXXIV (January and February, 1938), 165–72, 194–201.

Data are presented relating to one hundred children in the Children's Home of Cincinnati, where the population includes small percentages of mentally retarded individuals who are idiots and imbeciles.

239. LYNCH, KATHERINE D. "Enrichment of the Program for Subnormal Children," *Journal of Exceptional Children*, V (December, 1938), 49–53.

This report relates to types of experiences and activities in which subnormal children can profitably engage to enrich their experiences and make learning more functional in character.

240. MACINTYRE, E. MILDRED. "Teaching of Reading to Mentally Defective Children," *Proceedings and Addresses of the Sixty-first Annual Session of the American Association on Mental Deficiency*, Vol. XLII, No. 2 (1937), pp. 59–67.

The author describes her methods for teaching reading to children who are mentally defective.

241. MARTENS, ELISE H. "Occupational Preparation for Mentally Handicapped Children," *Proceedings and Addresses of the Sixty-first Annual Session of the American Association on Mental Deficiency*, Vol. XLII, No. 2 (1937), pp. 157–65.

Since industry can no longer absorb the unskilled or semiskilled pupils leaving special classes, these children are being increasingly prepared for service jobs.

242. MARTENS, ELISE H. "Home Economics for the Handicapped Pupil," *Practical Home Economics*, XVI (September, 1938), 338–40.

Home economics is recommended as a vital subject in the school curriculum for the retarded pupil. School activities in this field must be correlated with experiences outside.

243. MOORE, THOMAS V. "Standards in Training Teachers of Backward Children," *Catholic Educational Review*, XXXVI (November, 1938), 525–29.

Outlines a program for teachers who expect to work with backward children. Emphasis is placed on clinical experience.

244. MURPHY, M. "The Social Adjustment of the Exceptional Child of Borderline Mentality," *Journal of Consulting Psychology*, II (December, 1938), 169–75.

A follow-up study of ten mentally backward children showed the problems that these individuals meet in making social adjustments.

245. SPOHN, A. L. "Curriculum Provision for Slow Pupils," *North Central Association Quarterly*, XII (January, 1938), 331–33.

Summarizes data from a questionnaire relating to provisions for slow pupils in the North Central Association high schools.

246. STARR, ANNA SPIESMAN. "The Significance of Qualifying Factors in the Diagnosis of Borderline Mentality," *Training School Bulletin*, XXXIV (October, 1937), 113–18.

In diagnostic studies emphasis should be placed on the potentiality shown by borderline cases, not merely the negative findings with regard to status in school achievement.

247. STOGDILL, RALPH M. "Some Behavior Adjustment Techniques in Use with Mentally Retarded Children," *Journal of Exceptional Children*, V (November, 1938), 25–30, 45.

Describes adjustment work with children presenting various behavior problems at the Wayne County (Michigan) Training School.

248. VAUGHN, CHARLES L., and HUBBS, LORENA. "Teaching Reading Vocabulary to Lower Grade Morons," *Proceedings and Addresses of the Sixty-first Annual Session of the American Association on Mental Deficiency*, Vol. XLII, No. 2 (1937), pp. 68–76.

Special individualized help was found effective in giving reading instruction to feeble-minded teen-age boys. Stress was placed on ample repetition.

BEHAVIOR AND PROBLEM CASES[1]

249. FENTON, NORMAN, assisted by RAMONA WALLACE. "Child Guidance in California Communities: Part 6, Follow-up Study of Bureau Cases," *Journal of Juvenile Research*, XXII (January, 1938), 43–61.

Data for 821 cases studied at child-guidance bureaus in California were studied for adjustment subsequent to contacts with the bureaus. One-fourth were found to be adjusted, over half partially adjusted, the remainder unimproved or worse.

250. JASTAK, JOSEPH. "School Test Patterns of Clinic Children," *Delaware State Medical Journal*, X (May, 1938), 108–11.

School-age children in Delaware referred to a mental-hygiene clinic for various adjustment problems were found to have lower achievement in reading than in arithmetic.

251. KANNER, LEO. "Problem Children Growing Up," *American Journal of Psychiatry*, XCIV (November, 1937), 691–99.

The best results in subsequent adjustment of problem children were found in cases having the more favorable home and community backgrounds.

252. LOWENSTEIN, PEARL, and SVENDSEN, MARGARET. "Experimental Modification of the Behavior of a Selected Group of Shy and Withdrawn Children," *American Journal of Orthopsychiatry*, VIII (October, 1938), 639–53.

Children possessing specific neurotic symptoms, such as shyness or withdrawing behavior, were sent to a farm camp. In a small number of cases the neurotic symptoms disappeared after eight weeks.

[1] See also Item 389 (Cattell) in the list of selected references appearing in the May, 1939, number of the *School Review*.

253. MURPHY, WILLIAM C. "A Comparative Study of 50 White Male Truants with 50 White Male Non-truants," *Journal of Juvenile Research*, XXII (April, 1938), 93–102.

A controlled study of truant and non-truant boys in Ohio. In general, the non-truants rated higher in intelligence and educational achievement. They were also superior to the truant group in physical status.

254. O'CONNOR, ZENA C. *The Runaway Boy in the Correctional School.* Teachers College Contributions to Education, No. 742. New York: Teachers College, Columbia University, 1938. Pp. viii+78.

Runaway boys at the Children's Village institution were compared with an equivalent non-runaway group. The runaways were older, less well adjusted, had fewer leisure-time interests, and fewer recreational outlets. Implications for institutional treatment are indicated.

255. OUTLAND, GEORGE E. "The Home Situation as a Direct Cause of Boy Transiency," *Journal of Juvenile Research*, XXII (January, 1938), 33–42.

Irregular home background was found chiefly responsible for transiency among older boys studied in southern California.

256. REYMERT, MARTIN L., and KOHN, HAROLD A. "Suggestive Data concerning the Etiology of Behavior Problems," *Transactions of the Illinois State Academy of Science*, XXX (December, 1937), 281–83. Mooseheart, Illinois: Mooseheart Laboratory for Child Research.

Groups of problem and nonproblem boys, matched for age and sex, were found to be significantly different in intelligence, school placement, age on admission to Mooseheart, and other factors.

257. TALLMAN, FRANK F. "The Place of Occupational Therapy in Dealing with Problem Children," *Occupational Therapy and Rehabilitation*, XVI (October, 1937), 301–6.

Workbench and playground work are recommended to improve the adjustments of problem children.

258. WALLIN, J. E. WALLACE. "The Nature and Implications of Truancy from the Standpoint of the Schools," *Journal of Exceptional Children*, V (October, 1938), 1–6.

The writer reiterates his belief, previously expressed, that more funds should be spent for properly adjusted school instruction and less for truant officers.

259. WOODFIN, L. L. "Children and Their Emotional Problems," *Mental Health Observer*, V (January, 1938), 10–16.

Therapy provided by a child-guidance clinic is recommended for treating emotional problems in children.

260. YOUNG-MASTEN, ISABEL. *Behavior Problems of Elementary School Children: A Descriptive and Comparative Study.* Genetic Psychology Mono-

graphs, Vol. XX, No. 2, pp. 123–81. Provincetown, Massachusetts: Journal Press, 1938.

Elementary teachers throughout a school system listed 10 per cent of the pupils enrolled as behavior problems. The most commonly found problems are indicated, and the differences between problem and nonproblem groups are discussed.

JUVENILE DELINQUENCY

261. ABBOTT, G. (Editor). *The Child and the State:* Vol. II, The Dependent and the Delinquent Child, The Child of Unmarried Parents. Chicago: University of Chicago Press, 1938. Pp. xviii+702.

The material in this second volume of a series is summarized under the headings indicated in the title. The historical background for each section is summarized. Legislative enactments relating to these groups are comprehensively presented.

262. ARMSTRONG, CLAIRETTE P. "A Psychoneurotic Reaction of Delinquent Boys and Girls," *Journal of Abnormal and Social Psychology*, XXXII (October–December, 1937), 329–42.

The writer analyzes the causes which contribute to running away from home.

263. BEAM, KENNETH S. "What Can the Schools Do To Prevent Delinquency?" *School Management*, VII (November, 1937), 85, 100, 104.

Delinquency prevention lies primarily in overcoming subversive influences operating on high-school children and in providing more appropriate school training and more opportunities for desirable social contacts under supervision.

264. BRILL, JEANETTE G., and PAYNE, E. G. *The Adolescent Court and Crime Prevention.* New York: Pitman Publishing Corp., 1938. Pp. xiv+230.

This book presents the essential facts concerning adolescence and indicates the part played by the adolescent court in treating youthful offenders. The work of the Adolescent Court in Brooklyn, New York, is described.

265. BROWN, FRED. "Social Maturity and Stability of Non-delinquents, Proto-delinquents, and Delinquents," *American Journal of Orthopsychiatry*, VIII (April, 1938), 214–19.

Results from a personality inventory and developmental age scale show the superiority of nondelinquent boys to delinquent groups and to those who have engaged in antisocial behavior.

266. CARLSON, HAROLD S. "The Incidence of Certain Etiological and Symptomatic Factors among a Group of Iowa Delinquents and Felons," *Studies in Emotional Adjustment*, pp. 61–98. University of Iowa Studies in Child Welfare, Vol. XIII, No. 4. Iowa City, Iowa: University of Iowa, 1937.

The immediate environment appears to be more significant as a causal factor in crime and delinquency than has previously been shown. The etiology in adolescence as compared with adult cases is somewhat different.

267. CHINN, W. L. "A Brief Survey of Nearly One Thousand Juvenile Delinquents," *British Journal of Educational Psychology*, VIII (February, 1938), 78–85.

Among a thousand boys in a southern juvenile court, theft was the predominant offense. Factors in the home background and social environment distinguish this group from delinquents.

268. DUREA, MERVIN A. "Personality Characteristics of Juvenile Offenders in Relation to Degree of Delinquency," *Pedagogical Seminary and Journal of Genetic Psychology*, LII (June, 1938), 269–83.

Personality traits that distinguish subjects with the lowest and the highest delinquency index are summarized in this study. Delinquency careers can be predicted from weighted scores on interest-attitude tests.

269. GROSSMAN, GRACE. "The Role of the Institution in the Treatment of Delinquency," *American Journal of Orthopsychiatry*, VIII (January, 1938), 148–57.

This report describes a cottage plan for dealing with delinquent Jewish children.

270. HARRISON, L. V., and GRANT, P. M. *Youth in the Toils*. New York: Macmillan Co., 1938. Pp. viii+168.

Describes methods used in dealing with the delinquent boy problem in New York City. Illustrated by concrete cases.

271. HATFIELD, M. *Children in Court*. New York: Paebar Co., 1938. Pp. x+184.

Personal observations and anecdotal records kept by a juvenile-court judge furnish this material on juvenile delinquency.

272. HORSCH, ALFRED C., and DAVIS, R. A. "Personality Traits of Juvenile Delinquents and Adult Criminals," *Journal of Social Psychology*, IX (February, 1938), 57–65.

Differences in personality traits were shown in inmates in three levels of penal institutions: the industrial school, the state reformatory, and the state penitentiary. Each group was compared with a corresponding control group in the general population.

273. HORSCH, ALFRED C., and DAVIS, R. A. "Personality Traits and Conduct of Institutionalized Delinquents," *Journal of Criminal Law and Criminology*, XXIX (July–August, 1938), 241–44.

Personality traits in delinquents showed little relation to delinquency trends.

274. JAMESON, AUGUSTA T. "Psychological Factors Contributing to the Delinquency of Girls," *Journal of Juvenile Research*, XXII (January, 1938), 25–32.

Delinquent girls in a state institution co-operated with the author in studying their own delinquency. Reliable data were obtained through a questionnaire and autobiographical material.

275. KEPHART, NEWELL C. "An Experimental Study of the 'Disorganization' of Mental Functions in the Delinquent," *Studies in Emotional Adjustment*, II, 69–96. University of Iowa Studies in Child Welfare, Vol. XV, No. 1. Iowa City, Iowa: University of Iowa, 1938.

Statistically significant differences in mental traits were found in a comparative study of delinquent and nondelinquent children.

276. LICHTENSTEIN, MAURICE, and BROWN, ANDREW W. "Intelligence and Achievement of Children in a Delinquency Area," *Journal of Juvenile Research*, XXII (January, 1938), 1–24.

Children coming from an area of low economic status were found to be mentally retarded, on both verbal and nonverbal material. Placement in school was ahead of mental age.

277. LUNDEN, W. A. *Systematic Source Book in Juvenile Delinquency*. Pittsburgh, Pennsylvania: University of Pittsburgh, 1938 (revised). Pp. 390.

A revision of the 1936 book, with added material from the United States and Europe.

278. MARSHALL, JAMES, and MCCOOEY, MARGARET J. (Co-chairmen). *Report and Recommendations of the Joint Committee on Maladjustment and Delinquency*. New York: Board of Education, 1938. Pp. 128.

This bulletin describes the interrelations of school and community agencies in dealing with maladjustment and delinquency in New York City.

279. MICHAELS, JOSEPH J. "The Incidence of Enuresis and Age of Cessation in One Hundred Delinquents and One Hundred Sibling Controls," *American Journal of Orthopsychiatry*, VIII (July, 1938), 460–65.

Intimate relations, which appear to be common indicators of personality disorders, were found between enuresis and delinquency.

280. OWEN, M. B. "The Intelligence of the Institutionalized Juvenile Delinquent," *Journal of Juvenile Research*, XXI (October, 1937), 199–205.

Forty-three studies chosen from the literature on the subject of intelligence and delinquency are listed and summarized statistically.

281. SPEER, GEORGE S. "Wishes, Fears, Interests, and Identifications of Delinquent Boys," *Child Development*, VIII (December, 1937), 289–94.

The wishes, the fears, and the interests of a hundred adolescent delinquent boys were investigated.

282. TER KEURST, ARTHUR J. "Superstitious Nature of Delinquent and Nondelinquent Boys," *Journal of Criminal Law and Criminology*, XXIX (July–August, 1938), 226–40.

Nondelinquents were found to be less suggestible than delinquents of the same age in a state industrial school.

283. *Women and Girl Offenders in Massachusetts*. Boston: Massachusetts Child Council (41 Mount Vernon Street), 1938. Pp. 48.

A thoroughgoing examination of methods employed by the state in dealing with women and girl offenders. The need for adequately trained personnel in dealing with these cases is pointed out, and recommendations are made for better parole supervision.

284. WOODS, MARY TENISON. *Juvenile Delinquency: With Special Reference to Institutional Treatment.* Australian Council for Educational Research Series, No. 50. Melbourne, Australia: Melbourne University Press, 1937. Pp. 80.

The fundamental causes that produce juvenile delinquency require more thoroughgoing study than is ordinarily made. Surveys conducted in institutions in Victoria, New South Wales, and South Australia are summarized. Recommendations for diagnosis and treatment are included.

SUPERIOR AND GIFTED CHILDREN[1]

285. ELWOOD, MARY I. "A Descriptive Study of a Gifted Child," *Pittsburgh Schools*, XII (May, 1938), 169–73.

A gifted girl now eleven years of age and in Grade VIII is described.

286. HILDRETH, GERTRUDE. "Characteristics of Young Gifted Children," *Pedagogical Seminary and Journal of Genetic Psychology*, LIII (December, 1938), 287–311.

Gifted children ranging in age from three to nine years were found to have five times as many favorable traits as average children drawn from the same school population and having the same racial background.

287. HILDRETH, GERTRUDE. "The Educational Achievement of Gifted Children," *Child Development*, IX (December, 1938), 365–71.

A controlled study of the achievement of gifted children in elementary-school skills, measured by standard tests successively over a period of seventeen years.

288. MARTIN, LEWIS C. "The Education of Gifted Children," *Journal of Exceptional Children*, IV (February, 1938), 101, 109.

Data relating to methods used by public schools in twenty-six American cities for the education of gifted children constitute the material presented in this report. Class size, per pupil cost, methods of selection, and curriculum modifications are reported.

289. MARY ELEANORE, C.S.C., SISTER. "Organizing the Curriculum for the Bright Pupil," *Catholic School Journal*, XXXVIII (November and December, 1938), 259–60, 293–94; ———, XXXIX (January and February, 1939), 9–10, 40–41.

These are the first four in a series of six articles relating to the education of gifted children. The characteristics of gifted children are described, and curriculum objectives for their education are outlined.

[1] See also Item 384 (Hollingworth) in the list of selected references appearing in the September, 1938, number of the *Elementary School Journal*.

290. NEVILL, E. MILDRED. "Brilliant Children: With Special Reference to Their Particular Difficulties," *British Journal of Educational Psychology*, VII (November, 1937), 247–58.

Summarizes data for seventy-eight gifted children drawn from a clinic population. Superiority was noted in vocabulary, language expression, and alertness.

291. NOONAN, NORMA, and NORRIS, DOROTHY E. "Studies of Gifted Children," *Journal of Exceptional Children* (extra issue), (January, 1938), pp. 46–56.

This article summarizes the research findings concerning mental, physical, social, and emotional traits of gifted children, as well as the findings on school administrative procedures and curricular adjustments.

292. RIGG, MELVIN. "A Follow-up Study of Sixteen Superior Students," *School and Society*, XLVIII (September 24, 1938), 411–12.

A follow-up study of children who had been found on early tests to be gifted revealed children who still rated gifted, who had high personality ratings, good school standing, low age at graduation, and who participated actively in school activities.

TRENDS NOTED IN LITERATURE ON THE PHYSICALLY HANDICAPPED

The large number of bulletins and articles in the field of the physically handicapped indicates that medical, social, and educational agencies are active in bringing this field to the attention of a large lay group. There are many accounts of city school programs covering the various fields of the physically handicapped, and there are indications of extensions in rural areas.

Writers generally stress the need for careful articulation between medical and educational programs, particularly in cases of orthopedic, cardiac, speech, and visual disabilities. The need for personality study and the mental-hygiene approach to the individual problem is emphasized again and again. Adequate personality adjustment in respect to the handicap is a vital necessity.

There is increasing acceptance of the responsibility of the regular classroom teacher in the recognition of handicaps and prevention of problems. This trend is particularly noticeable in the field of speech. There are some reports on the preschool child with a handicap, but this area justifies far greater attention than has yet been given it. More psychological study is noted in the fields of the blind, the deaf, and the speech defective than in the other fields. Vocational guidance is recognized as a challenging problem which needs continued study. Inventories and studies in legislation may be noted as a result

of the Social Security Act and the introduction of the Pepper Bill into Congress.

BLIND AND PARTIALLY SEEING CHILDREN

293. DAVIS, LOUISE F. "The Teaching of Reading to the Visually Handicapped Child," *Peabody Journal of Education*, XVI (November, 1938), 201–5.

Describes various types of visual handicaps in school children and teaching techniques which meet these handicaps.

294. FJELD, HARRIETT A., and MAXFIELD, KATHRYN E. "Why a Program of Research on Preschool Blind Children," *Journal of Psychology*, VI (July, 1938), 43–68.

Discusses retardation, nervousness, and personality maladjustments of the preschool blind child. Outlines a proposed program of research and describes research activities carried on at the Arthur Sunshine Home for Blind Babies, Summit, New Jersey.

295. HATHAWAY, WINIFRED. "New Trends in Sight-saving Class Activities," *Sight-saving Review*, VIII (June, 1938), 106–15.

Recent medical and optical developments and advances in illumination, in auditory aids, and in vocational guidance are discussed.

296. HAYES, SAMUEL P. "What Do Blind Children Know?" *Teachers Forum for Instructors of Blind Children*, XI (November, 1938), 22–29, 32.

The use of information and achievement tests with blind children will give evidence of special mistakes and difficulties due to the handicap of blindness and will reveal the enriched and supplementary experiences that are needful to the child.

297. KNIEWEL, MARIE C. "Vocational Guidance for Sight-saving Classes," *Sight-saving Review*, VIII (December, 1938), 277–82.

Discusses general sources to which the teacher of the sight-saving class may refer for vocational information. Attention is called to the cultivation of wholesome attitudes toward a range of occupations and the analysis of personal qualifications for jobs.

298. LENDE, HELGA (Editor). *What of the Blind?* New York: American Foundation for the Blind, Inc., 1938. Pp. x+214.

This handbook reviews the current philosophy, the history of education of the blind, and the problem of their social adjustment.

299. MAXFIELD, KATHRYN E. "Building a Prereading Vocabulary for Small Blind Children," *Teachers Forum for Instructors of Blind Children*, XI (November, 1938, and January, 1939), 35–39, 43–48, 56.

Describes an investigation conducted at the Arthur Sunshine Home for Blind Babies, Summit, New Jersey, during a period of three and a half years. Vocabulary lists are included.

Crippled Children

300. Chambless, Elizabeth. "Eye and Ear Training for Spastics," *Volta Review*, XL (February and March, 1938), 102–4, 120; 166–68, 184–85.

A teacher describes the valuable results derived from lip-reading instruction in a school for spastic children.

301. Crothers, Bronson. "Education of the Handicapped Child," *American Journal of Public Health*, XXVIII (March, 1938), 340–42.

Adequate treatment and education of orthopedic children require a close co-operation between physicians, psychiatrists, psychologists, and teachers.

302. Lee, John J. "The Training of Teachers for Orthopedic Classes," *Journal of Exceptional Children*, V (December, 1938), 59–64.

The general adviser of special education at Wayne University, Detroit, discusses personal qualifications and experience desirable in teachers of orthopedic classes and outlines suitable courses.

303. Meador, Mildred. "A Public School for the Crippled Child," *Public Health Nursing*, XXX (August, 1938), 474–77.

A description of the work for crippled children carried on in the Randall J. Condon School in Cincinnati, where the curriculum is an activity program based on the needs and interests of the children.

304. Phelps, Winthrop Morgan. "The Care of Cerebral Palsies," *Crippled Child*, XV (April, 1938), 153–54.

Describes a program carried on at the Children's Rehabilitation Institute in Baltimore, a school for children affected with cerebral palsy who, after a trial period of three months, prove to be capable of improving both physically and mentally.

305. Reznikoff, Leon. "Emotional Factors in the Rehabilitation of the Physically Disabled," *American Journal of Psychiatry*, XCIV (January, 1938), 819–24.

The author states that for too long the problem has been approached from the physical point of view rather than from the standpoint of the individual's emotional reactions.

306. Strauss, Marion. "The Spastic in Our Schools," *Crippled Child*, XV (April, 1938), 160–63.

Analyzes the problems of the teacher and emphasizes the need for ingenuity in guiding the child to help himself.

307. Walton, Mildred, and Volay, Lillian. "Learning through Play," *Crippled Child*, XVI (August, 1938), 67–70.

Describes a variety of games and play that can be used in a hospital class to serve many purposes.

Deaf and Hard-of-Hearing Children

308. Ewing, Irene R., and Ewing, Alex. W. G. *The Handicap of Deafness.* London: Longmans, Green & Co., 1938. Pp. xii+328.

A detailed account of the educational and the psychological problems of the deaf and of the hard-of-hearing, of experimental methods in the measurement of residual hearing and the development of its use with hearing aids, of the value of lip reading, and of vocational training. The problems at all levels, from preschool to adult, are discussed.

309. Johnson, Clyde W. "On the Medical Battle-Front," *Volta Review*, XL (January, 1938), 25–30.

Presents clearly the recent advances in the medical treatment of deafness. Includes a statement of therapeutic measures of proved value.

310. Kirk, Samuel A. "Behavior Problem Tendencies in Deaf and Hard-of-Hearing Children," *American Annals of the Deaf*, LXXXIII (March, 1938), 131–37.

Reports a study of the ratings of 112 deaf and hard-of-hearing pupils in Grades I–VIII on the Haggerty-Olson-Wickman Behavior Rating Schedule. More emotional problems appear in this group than in a group of hearing children.

311. Lane, Helen Schick. "Measurement of the Mental and Educational Ability of the Deaf Child," *Journal of Exceptional Children*, IV (May, 1938), 169–73, 191.

Reports a psychological testing program at Central Institute for the Deaf, St. Louis, Missouri. The results on a series of performance tests designed to eliminate language difficulty gave a normal curve of distribution rather than the serious retardation reported in other studies. Well-known educational tests were used as an aid in helping pupils to approximate normal educational progress.

312. "Proceedings of the Sixteenth Summer Program Meeting of the American Association To Promote the Teaching of Speech to the Deaf, Held in Detroit, Michigan, June 27–July 1, 1938," *Volta Review*, XL (November, 1938), 617–752.

The subjects discussed are new trends, developments in better speech, better language, the use of hearing aids, and better understanding at home.

313. Springer, N. Norton. "A Comparative Study of the Psychoneurotic Responses of Deaf and Hearing Children," *Journal of Educational Psychology*, XXIX (September, 1938), 459–66.

Comparisons were made between the psychoneurotic responses of hearing and of deaf children on the Brown Personality Inventory for Children. All groups of deaf children received higher neurotic scores than the hearing children.

314. Stanton, Mildred B. *Mechanical Ability of Deaf Children.* Teachers College Contributions to Education, No 751. New York: Teachers College, Columbia University, 1938 Pp. viii+66.

Reports a matched-group study of the mechanical ability of deaf and hearing children of the same age, nationality, and parental occupational level. The performance of the deaf boys is equal to that of the normal boys. Deaf girls tend to be inferior. The wide range of ability shown in the tests suggests the need for individual guidance for deaf pupils.

315. TIMBERLAKE, JOSEPHINE B. "So You Are Going To Hear Better," *Volta Review*, XL (September, 1938), 505–10.

Reports the development to date in commercial hearing aids and the use of word tests in the individual selection of an aid.

316. VOELKER, CHARLES H. "An Experimental Study of the Comparative Rate of Utterance of Deaf and Normal Hearing Speakers," *American Annals of the Deaf*, LXXXIII (May, 1938), 274–84.

Reports that the deaf speakers studied had 150 per cent slower intonation than normal. A fourth of the group used 80 words or more a minute but were noticeably slow.

DELICATE CHILDREN

317. BISHOP, LOUIS FAUGERES, JR. "The Child with a Cardiac Handicap," *Public Health Nursing*, XXX (September, 1938), 513–17.

A physician advises that all persons who care for children should be on the alert for symptoms of chronic rheumatic fever. Every cardiac child should be kept within the limits of his reserve energy.

318. BROWN, GEORGE DAVENPORT. "The Development of Diabetic Children, with Special Reference to Mental and Personality Comparisons," *Child Development*, IX (June, 1938), 175–84.

Reports a study of a group of diabetic children to discover influences of the physical disorder on physique, intelligence, and personality. No significant deviation from the average was found either in the case of siblings or the whole group of school children.

319. OETTINGER, KATHERINE BROWNELL. "An Experiment in Teaching Physically Handicapped Children at Home," *Mental Hygiene*, XXII (April, 1938), 245–64.

Describes in detail a home-teaching project for two hundred children suffering from cardiac, orthopedic, and other ailments, which was carried out by the Visiting Nurse Association of Scranton, Pennsylvania, with the assistance of the Works Progress Administration.

320. ROBINSON, HAROLD C. "Physical Education of Cardiacs," *Journal of Health and Physical Education*, IX (May, 1938), 289.

States need for working out individual programs for cardiac children and gives advice to parents and teachers.

SPEECH DEFECTIVES

321. AREY, MABEL LOUISE. "A Diagnostic Profile of the Speech of Children in Grades I, II, and III," *Quarterly Journal of Speech*, XXIV (April, 1938), 265–68.

On the premise that speech correction is most advantageous when begun early, the author describes a plan of diagnostic testing for all primary pupils in the first three grades.

322. BENDER, JAMES F., and KLEINFELD, VICTOR M. *Principles and Practices of Speech Correction.* New York: Pitman Publishing Corp., 1938. Pp. xiv+298.

Presents a suggested course for teachers of speech correction, with an adequate background of information about the psychological and the physiological aspects of speech. Discusses analysis and diagnosis of speech disorders and their relation to personality. Illustrative aids, a glossary, and bibliographies are also included.

323. BERRY, MILDRED FREBURG. "The Developmental History of Stuttering Children," *Journal of Pediatrics*, XII (February, 1938), 209–17.

Presents data from the medical records of five hundred stuttering and five hundred non-stuttering children with respect to prenatal conditions and delivery, birth weight, type of feeding, period of breast feeding, walking, and the initiation and the development of intelligible speech.

324. MEADER, CLARENCE L. "New Emphases in Speech Rehabilitation," *Quarterly Journal of Speech*, XXIV (April, 1938), 233–39

The author states that a history of the individual to discover factors affecting the developing physical aspects of speech is valuable, since all structures and processes are determined by the condition of their origin and growth. The biological approach is also an aid in interpreting the social problems related to speech as an expression of the personality.

325. NYLEN, DONALD. "Guidance and Speech in the School Program," *Quarterly Journal of Speech*, XXIV (December, 1938), 603–9.

Presents the viewpoint that guidance and speech work have a common purpose. The thesis is illustrated by a case study of a high-school boy who stuttered.

326. STINCHFIELD, SARA M., and YOUNG, EDNA HILL. *Children with Delayed or Defective Speech.* Stanford University, California: Stanford University Press, 1938. Pp. xvi+174.

Presents studies of mental, physical, and hearing tests of preschool children with speech problems. The authors describe a method of aiding speech by a psychological and motor-kinesthetic approach.

327. VAN RIPER, C. "Persistence of Baby Talk among Children and Adults," *Elementary School Journal*, XXXVIII (May, 1938), 672–75.

Gives results of an examination of the records of sixty cases diagnosed as baby talkers. Parents and teachers are urged to take steps in the early elimination of baby talk.

328. WEST, ROBERT (Editor). *Proceedings of the American Speech Correction Association*, Vol. VIII. Madison, Wisconsin: College Typing Co., 1938. Pp. 96.

Contains papers by leaders in the field, among them Travis, West, Goldstein, Bryngelson, and Bluemel. Some of the subjects discussed are stuttering behavior and its prognosis, aphasic learning, and speech spasticity.

General References

329. Amoss, Harry. "Special Education in Rural Communities," *Journal of Exceptional Children*, V (January, 1939), 73–75, 93.

The provincial inspector of auxiliary classes in Ontario, Canada, describes the rural plan for backward, orthopedic, sight-defective, speech-defective, and home-bound pupils. This plan cares for the individual pupil wherever he is discovered.

330. Berry, Charles Scott. "Federal Aid for the Education of Physically Handicapped Children," *Journal of Exceptional Children*, V (November, 1938), 38–41, 44.

A well-known authority in the field advocates federal aid and sets forth the purposes of the Pepper Bill for federal aid introduced into the Senate in 1937.

331. Blauch, Lloyd E. *Vocational Rehabilitation of the Physically Disabled.* Advisory Committee on Education, Staff Study No. 9. Washington: Government Printing Office, 1938. Pp. x+102.

A comprehensive study covering the rehabilitation concept, the evolution of federal co-operation, the extent of the program, its methods, procedures, and values. One chapter is given over to a description of special services for the blind.

332. Bryne, May E. "Preparing the Handicapped Child To Live," *Public Health Nursing*, XXX (December, 1938), 734–37.

The director of special education in Minneapolis, Minnesota, states the philosophy of the school, which recognizes the common needs of all children and seeks to provide a program of freedom and security for the individual in the setting of the regular school.

333. Endres, Joseph J. *The Education and Care of Physically Handicapped Children.* Bulletin of the University of the State of New York, No. 1132. Albany, New York: University of the State of New York, 1938. Pp. 22.

Explains the state program, which functions under legal provisions, for the education and care of crippled and other physically handicapped children included under the Children's Court Act and the Education Law.

334. Foster, Emery M., and Martens, Elise H. "Statistics of Special Schools and Classes for Exceptional Children," *Biennial Survey of Education in the United States: 1934–36*, Vol. II, chap. vi. United States Office of Education Bulletin No. 2, 1937. Pp. iv+180 (advance pages).

Includes a brief section on the status of this educational field, followed by a statistical survey (as of 1936) of the education of various types of exceptional children in city systems and residential schools.

335. FRAMPTON, MERLE E., and ROWELL, HUGH G. (Editors) *Education of the Handicapped:* Vol. I, History. Yonkers-on-Hudson, New York: World Book Co., 1938. Pp. xii+260.

This book is the first of two volumes on the handicapped. It covers the history of the movement for care and education of persons who deviate physically, mentally, and socially. A forthcoming volume will discuss current education and trends.

336. INTERNATIONAL SOCIETY FOR CRIPPLED CHILDREN. *Digest of Federal and State Legislation Affecting Crippled Children and the Physically Handicapped.* Elyria, Ohio: International Society for Crippled Children, 1938. Pp. 76.

A report of the Committee on Legislation, compiled on the basis of information submitted by each state and of an analysis of existing federal legislation. It is designed to serve as a source of reference in legislative projects.

337. LINDENAU, DOROTHEA, and ALEXANDER, CARTER. "Guide to the Literature on the Handicapped Child," *Journal of Exceptional Children*, V (November, 1938), 31–37, 45.

The authors have prepared a brief guide to aid school workers in locating the sources of practical help in the literature on all types of handicaps.

338. MARTENS, ELISE H. *Occupational Experiences for Handicapped Adolescents in Day Schools.* United States Office of Education Bulletin No. 30, 1937. Pp. 62.

Reports a survey in a selected number of cities of prevocational programs for the preparation of mentally or physically handicapped children.

339. MARTENS, ELISE H. *Opportunities for the Preparation of Teachers of Exceptional Children.* United States Office of Education Bulletin No. 17, 1937. Pp. 58.

A compilation of data regarding curriculums offered in teacher-training institutions for the preparation of teachers of various types of exceptional children.

Educational Writings

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REVIEWS AND BOOK NOTES

LIVING AND LEARNING.—Since there have been made available to the public all too few chronicles of specific practices in modern elementary schools, educators engaged in developing modern programs in their schools will welcome a new publication from the pen of Gertrude Hartman.[1] The book is a description of practices in a situation which, on the surface at least, appears to be almost ideal. No doubt all elementary-school teachers have at some time dreamed of working in a situation where the children came from a "quiet, simple, regular life at home"; where the school grounds were sufficiently large to provide plenty of play space, woods, lawn, and pools; and where the school building contained large, commodious rooms with easy chairs and fireplaces.

In 1928 at Downers Grove, a suburb of Chicago, the present Avery Coonley School was built. Mrs. Coonley, for whom the school is named, was one of the organizers and is still connected with the school. Some two hundred boys and girls are enrolled in this school, which provides for education over a period of ten years—two years of kindergarten and eight elementary grades.

After a detailed description of the school plant, the curriculum pattern is revealed. Chapter i, "Learning about Their World," describes the transition from home to school during two years of kindergarten and the study of the community by Grades I and II. The six- and seven-year-old children also have the responsibility of taking care of the goats and the chickens at the school. In these grades, according to the author, a beginning is made in the three R's. Chapter ii, "The Natural Order," explains the main theme for Grades III and IV, namely, the study of the universe and some of the elementary physical features of the earth. During the later part of this two-year period a more detailed study of geography is included. Chapter iii, "Primitive Life," relates various experiences of Grade V in the study of life of prehistoric man. Chapter iv, "Man's Advancing Civilization," carries the reader along with Grade VI in the growth of civilization as a continuous story from the early Egyptians through medieval life. Chapter v, "Our Interdependent World," describes the study of the Industrial Revolution which is made in Grade VII. Chapter vi, "Discovering America," relates the work of Grade VIII, which includes a historical development of the United States. The next three chapters tell of the many activities in science, shop, literature, music, and art. Chapter x describes briefly "The School Day." Chapter xi, "The Home and the School," gives an

[1] Gertrude Hartman, *Finding Wisdom: Chronicles of a School of Today*. New York: John Day Co., 1938. Pp. xvi+148. $3.00.

interesting picture of the friendly relations existing between parents and the school.

The book is profusely illustrated and contains several plates in color. There are also many examples of poems and short prose selections written by children of various ages. The organization of the entire book is such that the reader gets the spirit of the school almost as if he had actually visited this interesting educational institution at Downers Grove.

The question arises: *How valuable* is a description of the Avery Coonley School for public-school teachers? No doubt the book will raise the same old cry on the part of many, "Yes, they can do this in a private school, but, with my large number of pupils coming from many types of homes and with my limited equipment, it can't be done." The book should be a challenge to teachers working in situations similar to this Downers Grove School and should cause them to resolve to accomplish a higher type of instruction, and it provides many illustrations which should be valuable for teachers in public schools that are developing modern programs. One significant item to the writer is that, with all the fine buildings and equipment and high-type children, the school has not gone to the ridiculous extreme of declaring that the curriculum is built on the spur of the moment to follow the immediate interests of boys and girls. Perhaps John Dewey and Boyd Bode will be pleased to see that there is continuity in the plan and the experiences for boys and girls enrolled in this school, that the teaching is, no doubt, inspirational but not extemporaneous. It may, however, be claimed by some that the persons in charge of the Avery Coonley School have gone too far in determining just what the theme for each group shall be without permitting much opportunity for variation according to the needs and the interests of the children.

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ARITHMETIC BECOMES A MEANINGFUL SUBJECT.—It is a well-known fact that pupils who have failed to gain promotion in the grades of the elementary school frequently have had trouble with arithmetic. Arithmetic is said to outrank all other subjects as a cause of failure. In defense of the children, many persons have said that something must be done about arithmetic. The remedy which has been adopted in some schools has been simplicity itself. The reasoning and the conclusion seem to have run as follows: "Arithmetic causes failures. Eliminate or reduce the amount of arithmetic, and you will eliminate or reduce the number of failures."

It seems probable that some of those who have led the "flight from arithmetic" know children better than they know arithmetic and its role in modern life, even in child life. Certainly they know children better than they know how to teach arithmetic. The trouble seems to lie, not in the fact that arithmetic is too difficult for children or that arithmetic is foreign to their lives and interests,

but in the fact that arithmetic is often taught so that it fails to have meaning. The method has consisted essentially in drilling on isolated elements of skill. The learning has been rote learning.

A reform is under way, and it has already made marked progress in many communities and in many schoolrooms. In recent years, particularly in the past decade, there has been discernible a new trend. The authors of the set of books under review,[1] as indicated by the title which they have chosen, claim to have incorporated this trend in their books. In the Preface to the books for Grades III and IV, they announce their "purpose to make books that would be in accord with the unmistakable new trend in arithmetic in the schools" (p. iii); and, in the Preface to the books for Grades V and VI, they say that " 'New Trend' characterizes a merging, forward-moving group of principles which are determining a more rational and more effective teaching of arithmetic" (p. iii). There are several important respects, in the opinion of the reviewer, in which the authors have been successful.

One of these has to do with the grade placement of arithmetic topics. A convenient example is found in the teaching of the multiplication combinations. In their earlier books, called *The New Day Arithmetics* (1930), all the multiplication combinations through 9×9 are presented in the material designed for use in Grade III. In the books under review the third-grade material goes only through the 5's (including 9×5 and 5×9).

Another has to do with the organization and the sequence of steps in developing the fundamental operations with integers. For example, short division in examples with carrying is not introduced until the fifth year, although the reviewer wonders why this postponement was not made in 1930, since the teaching of long division before short division had been widely recommended and had been supported by some experimental evidence at that time. In the other direction, considerable elementary work with fractions is done in Grades III and IV—a move quite in harmony with children's abilities, interests, and experiences.

The books abound with helpful, objective aids to learning. In the fifth-grade book, page 78, for example, the meaning of $\frac{1}{2}$ multiplied by 4 is shown by drawings of four drinking glasses, each half full. There are numerous well-drawn diagrams and illustrations of other types, many in color.

The pupils are urged to be careful and thoughtful as they work examples and solve problems. The "steps" in solving division examples include the two very important comparison steps, which were omitted in the earlier series. A list of problems which is designed to give practice on one operation may include problems requiring the use of another operation, and the pupil is admonished, "Be careful."

[1] Harry O. Gillet, Thomas J. Durell, Fletcher Durell, and Ben A. Sueltz, *The New Trend Arithmetic:* Third Year, pp. xii+306; Fourth Year, pp. xiv+306; Fifth Year, pp. xvi+336+xxxii; Sixth Year, pp. xvi+336+xxxiv; Seventh Year, pp. x+372+xxii; Eighth Year, pp. x+372. New York: Charles E. Merrill Co.

A few analyses of sets of practice examples soon convince the reader that the authors have built their materials according to a plan which should provide systematically for a distribution of practice over the various elements involved. There are some minor exceptions, but, in general, practice has been well distributed.

New processes are developed meaningfully. For example, multiplication is shown to be closely related to addition. This demonstration helps in establishing the meaning of multiplication and makes clear the significance of the operation of carrying. The meaning of decimal fractions is illustrated with drawings, although illustrations are more frequently used for common fractions than for decimal fractions. The application of common fractions to music is an attractive innovation.

The reviewer believes that there are additional respects in which the new trend in arithmetic might have been shown. He believes that zero combinations are introduced prematurely and that zero combinations are permitted to occur in isolation in situations in which they would not normally be found. The reviewer believes that the addition and the subtraction facts should be taught together as teaching units; in these books they are not brought together until some time after they have been taught. The least common denominator for fractions having denominators with a common factor is found by taking cognizance of the common factor. The reviewer questions whether the pupils will see why the product of the denominators should be divided by their common factor.

Examples provided for practice in division contain far more examples with integral quotients than would occur in normal affairs. Furthermore, the remainders are nearly always expressed as fractional parts of the divisor. Of course it is true that in the practical situation the remainder sometimes is properly expressed merely as a remainder and not in such a form as to make the quotient a mixed number.

Minor slips and irregularities are not numerous. One wonders how the pupil is to use a sheet of paper to cover .75 of a square (Sixth Year, p. 6) and why such expressions as "Multiply 2 times 225" (Fourth Year, pp. 178, 179) are used. In general, however, the books are in good form and good taste.

This series is not merely a revision of the original series by the same authors. Much of the older material has been used in the later series, to be sure; but much has been rewritten, there is a different organization, and the suggested methods differ. The number of pages has been increased by about 40 per cent. The format is more attractive, and the illustrations are better.

One of the striking developments in American education in recent years is the development in textbooks. The books under review reflect many of the recent improvements. They merit a share of the credit for current educational progress.

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HEALTH EDUCATION FROM A DIFFERENT ANGLE.—Nash's new book[1] of 244 pages is divided into 12 chapters, a Summary, and an Epilogue. By his clear and emphatic discussion of the problems of health and of how to approach them, the author shows that he has a wide knowledge of the field of health education.

The book begins with a discussion of what health really is. Then there is a discussion of "The Stroke-Glide of the Human Engine," in which the author explains his concept of the *rhythm* of activity. He outlines the fundamental body needs: nutrition, activity, rest, sleep, and freedom from infection. There is a discussion of the elimination of strain (the most common hazard to healthful living today), followed by an analysis of "Truths and Part-Truths about Health."

The author emphasizes the fact that there are certain *teachable moments* in the lives of children and their parents and that in these moments lessons can be taught because of a certain receptiveness which may not always be present. These moments come (1) when a child exhibits curiosity, (2) when he feels that differences make him conspicuous, and (3) when adults become frightened about some abnormal signs or symptoms. The book contains excellent discussions of fallacies and the ideas which give rise to false impressions concerning health.

It is strange that people believe many things which, their common sense should tell them, either are untrue or are only partly true, for example, that clean teeth will not decay, that health results from conforming to a height-weight scale, that standing and sitting straight are essential to health, that constipation in any form means "auto-intoxication," that the bowels should be kept open at all costs, and that exercise prolongs life. The volume under discussion should do much toward clearing up some false beliefs which most teachers have and which they pass on to children.

The author concludes his discussion with an outline of what the community could do about the promotion of health, and he brings up the problem of universal medical care—a question engaging many people in debate at present. It is futile to recommend removal of infectious drains if the great majority of the people simply do not have the necessary funds to pay for the services. When education was mostly a private rather than a public function, illiteracy was common. The public school has been responsible for universal education. Organized medicine or the state will have to provide adequate medical care if the goal of universal health education is to be realized.

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A TEXTBOOK IN SCIENCE FOR JUNIOR HIGH SCHOOL PUPILS.—Science in the public schools is thought of as a continuous integrated program that is approached through environmental situations with which children are familiar.

[1] Jay B. Nash, *Teachable Moments: A New Approach to Health.* New York: A. S. Barnes & Co., 1938. Pp. x+244. $1.50.

It is thought of as a program to help boys and girls gain a new way of looking at their common experiences. Pupils are to be trained in interpreting and understanding these experiences so that they can use the knowledge gained in solving other problems which come up in everyday living.

It is to meet such an understanding of the school program in science that this new book[1] has been written. It is the first book of a three-book series for junior high schools and is a part of a more extensive series including books for elementary-school pupils, as well as junior high school pupils. This book takes its departure from the work of the sixth-grade book (Wilbur L. Beauchamp, Mary Melrose, and Glenn O. Blough, *Discovering Our World*, Book III. Chicago: Scott, Foresman & Co.), of which it is a continuation. It has a definite place in the scheme of the large series of nine books.

The teaching materials are organized on the unit-problem plan and have been adapted in such a way that teaching and learning are facilitated. Attention of pupils is directed toward the development of basic science principles which are important in interpreting, understanding, and solving problems common in the environment of seventh-grade children. The materials are arranged so that ideas are enlarged gradually. This integration is noticeable from unit to unit in this particular book, as well as from grade to grade in the series.

Each unit is introduced by an interesting picture, which, together with an excellent descriptive legend, presents the problem of the unit. The picture is followed by introductory exercises for helping the pupils check themselves in order to discover whether they understand certain large ideas that they will need to know as they continue their study, to recall experiences that may be of help in the work, and to check the information that they already have about the unit. The authors give further direction of work by a section entitled "Looking Ahead," which is intended to give pupils an understanding of what the unit is about and why it is interesting. Following this section a number of problems are given. For each of the problems, reading materials, experiments, self-testing exercises, and a number of additional problems are suggested. A glossary is included at the close of the book to give help in pronouncing and understanding the scientific terms used in the study.

A unique feature is the definite provision for training in developing desirable scientific attitudes and scientific methods of thinking. In addition, opportunities are provided for applying these methods and attitudes in solving everyday problems and in understanding environmental situations.

This book is a definite contribution in the field of science in the public schools. It is written in an attractive and an interesting style, with a vocabulary that is appropriate for seventh-grade children. It is abundantly illustrated by

[1] Wilbur L. Beauchamp, John C. Mayfield, and Joe Young West, *Science Problems for the Junior High School*, Book I. Basic Studies in Science. Chicago: Scott, Foresman & Co., 1938. Pp. xii+432. $1.28.

valuable pictures and drawings, which are enhanced by excellent captions. The illustrations are an integral part of the text. All teachers of science in junior high schools will be interested in this book.

FLORENCE G. BILLIG

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A SONG BOOK FOR HOME AND SCHOOL.—With the development of preschool education there have appeared a number of books to assist parents and teachers in caring for the musical interests and needs of young children. Such is the nature of a book recently published.[1]

According to a statement in the Preface, the songs are designed for use by parents, teachers, and the little folks themselves. They are the result of the author's experience and are about things which generally appeal to boys and girls of preschool and kindergarten age. Among the titles are "My Music Box," "Do You Know?" "My Doggie," "My Kitty," "Whirling Leaves," "The Brownies," "My Rabbit," "Lovely Things," "Dolly's Washday," "Thank You," "The Ocean," "The Clock," "Mr. Snowman," "Lullaby," and "The Sandman." The songs are short and simple and employ only a limited number of tones. In these respects the material is suitable for beginning vocal work. The use of accompaniments easy enough for playing by children or by adults with little pianistic skill is commendable and is a plan that others might well follow when compiling similar material. The pictures of photographic type that appear on each page are a distinctive feature of the book and add to the interest of the songs.

A question might be raised whether children, even at a very early age, do not prefer songs of greater musical qualities than those contained in this volume. Judged from a musical standpoint, the melodies, on the whole, are uninspired and commonplace. Most of the songs have only straight note beats, although at times uneven combinations would have been more natural. Some of the songs—for example, such songs as "The Clock" and "My Top"—written in $\frac{4}{4}$ meter sound more effective when sung in $\frac{2}{4}$ time. Due regard has not always been paid to the words when they were set to music. For example, in "Do You Know?" and "Thank You" main stress or accent sometimes falls on unimportant words. The plan of grouping eighth notes in "On the Slide" would be confusing to young or inexperienced players and singers.

Despite these adverse comments, the book is recommended to parents and teachers of young children. Some of the songs are pleasing and will be useful in early training. Physical makeup is attractive. Binding and cover are durable, and paper and print are good. Unfortunately, table of contents, index, and page numbers are missing.

ANNE E. PIERCE

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[1] *Songs and Pictures for Little Folks.* Words and Music by Helen C. Knowles. Photographs by Ruth Alexander Nichols. New York: A. S. Barnes & Co., Inc., 1938. $1.50.

CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

Art Education Today, 1939. An Annual Devoted to the Problems of Art Education Sponsored by Members of the Fine Arts Staff of Teachers College, Columbia University. New York: Teachers College, Columbia University, 1939. Pp. 90. $1.25.

ATYEO, HENRY C. *The Excursion as a Teaching Technique.* Teachers College Contributions to Education, No. 761. New York: Teachers College, Columbia University, 1939. Pp. vi+226. $2.35.

BLAIR, GLENN MYERS. *Mentally Superior and Inferior Children in the Junior and Senior High School: A Comparative Study of Their Backgrounds, Interests, and Ambitions.* Teachers College Contributions to Education, No. 766. New York: Teachers College, Columbia University, 1938. Pp. xii+88. $1.60.

Creative Expression: The Development of Children in Art, Music, Literature, and Dramatics. Edited for the Progressive Education Association by Gertrude Hartman and Ann Shumaker. Milwaukee, Wisconsin: E. M. Hale & Co., 1939 (second edition). Pp. 350. $2.00.

Educational Yearbook of the International Institute of Teachers College, Columbia University, 1938. Edited by I. L. Kandel. New York: Teachers College, Columbia University, 1938. Pp. xvi+400. $3.70.

HOLZINGER, KARL J., and SWINEFORD, FRANCES. *A Study in Factor Analysis: The Stability of a Bi-factor Solution.* Supplementary Educational Monographs, No. 48. Chicago: Department of Education, University of Chicago, 1939. Pp. xii+92. $1.00.

JERSILD, ARTHUR T., and FITE, MARY D. *The Influence of Nursery School Experience on Children's Social Adjustments.* Child Development Monographs, No. 25. New York: Teachers College, Columbia University, 1939. Pp. xii+112. $1.60.

KENDALL, GLENN M. *The Organization and Teaching of Social and Economic Studies in Correctional Institutions.* New York: Teachers College, Columbia University, 1939. Pp. xii+160. $1.85.

KINSCELLA, HAZEL GERTRUDE, and TIERNEY, ELIZABETH M. *Music in the Small School.* Lincoln, Nebraska: Teachers College and the University Extension Division of the University of Nebraska, 1939. Pp. viii+176.

LOMBARDI, MARYELLEN MAHER. *The Inter-Trait Rating Technique.* Teachers College Contributions to Education, No. 760. New York: Teachers College, Columbia University, 1938. Pp. 100. $1.60.

Music Education in the Elementary School. Sacramento, California: State Department of Education, 1939. Pp. xvi+152. $1.00.

NOLL, VICTOR H. *The Teaching of Science in Elementary and Secondary Schools.* New York: Longmans, Green & Co., 1939. Pp. viii+238. $2.00.

REED, HOMER B. *Psychology and Teaching of Secondary-School Subjects*. New York: Prentice-Hall, Inc., 1939. Pp. xviii+684. $3.25.

Schools in Small Communities. Seventeenth Yearbook of the American Association of School Administrators. Washington: American Association of School Administrators, 1939. Pp. 608. $2.00.

Selected References in Education, 1938. Reprinted from the *School Review* and the *Elementary School Journal* for January to December, 1938. Supplementary Educational Monographs, No. 47. Chicago: Department of Education, University of Chicago, 1939. Pp. x+222. $0.90.

STRICKLAND, RUTH G. *A Study of the Possibilities of Graphs as a Means of Instruction in the First Four Grades of the Elementary School*. Teachers College Contributions to Education, No. 745. New York: Teachers College, Columbia University, 1938. Pp. viii+172. $1.85.

THIELE, C. L. *The Contribution of Generalization to the Learning of the Addition Facts*. Teachers College Contributions to Education, No. 763. New York: Teachers College, Columbia University, 1938. Pp. viii+84. $1.60.

WARD, WINIFRED. *Theatre for Children*. New York: D. Appleton-Century Co., Inc., 1939. Pp. xvi+334. $3.00.

WILLIAMS, JOHN PAUL. *Social Adjustment in Methodism: The Adjustment of the Methodist Episcopal Church to the Changing Needs of Its Constituency, as Illustrated by a Survey of the Opinions of Methodists Living in and near Springfield, Massachusetts*. Teachers College Contributions to Education, No. 765. New York: Teachers College, Columbia University, 1938. Pp. x+132. $1.60.

WINSLOW, LEON LOYAL. *The Integrated School Art Program*. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xiv+392. $3.50.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

COLEMAN, CHARLES H., and WESLEY, EDGAR B. *America's Road to Now*. Boston: D. C. Heath & Co., 1939. Pp. xiv+624+xxx. $1.76.

GATES, ARTHUR I., HUBER, MIRIAM BLANTON, and PEARDON, CELESTE COMEGYS. *The New Work-Play Books*. Basal Readers: *Off We Go* (Pre-primer), pp. 64, $0.20; *Jim and Judy* (Primer), pp. 154, $0.72; *Down Our Street* (First Reader), pp. 202, $0.84; *We Grow Up* (Second Reader), pp. 248, $0.88; *Wide Wings* (Third Reader), pp. 344, $0.96. Optional Readers: *Beginning Days* (a Pre-reading Book) by Arthur I. Gates and Lillian Minor, pp. 48, $0.20; *Now We Go Again* (Supplementary Pre-primer), pp. 48, $0.20; *The Surprise Box* (a Unit Reader), pp. 48, $0.16. *Preparatory Books: To Accompany "Jim and Judy,"* pp. vi+122, $0.32; *To Accompany "Down Our Street,"* pp. 136, $0.32; *To Accompany "We Grow Up,"* pp. 128, $0.32; *To Accompany "Wide Wings,"* pp. 128, $0.32. *General Manual* by Arthur I. Gates, pp. 88, $0.20. *Reader-Manuals* by Arthur I. Gates, with the assistance of Mary M. Bartlett: *For "Beginning Days," "Off We Go," and "Now We Go Again,"*

pp. 98, $1.40; *For "Jim and Judy,"* pp. 172, $1.32; *For "Down Our Street,"* pp. 178, $1.48; *For "We Grow Up,"* pp. 216, $1.56; *For "Wide Wings,"* pp. 190, $1.80. New York: Macmillan Co., 1939.

HESSLER, JOHN C., and SHOUDY, HENRY C. *Understanding Our Environment: An Introduction to Science.* Chicago: Benj. H. Sanborn & Co., 1939. Pp. x+662.

HILL, HOWARD C., and ANDERSON, HAROLD A. *Living Together in My Community.* A revision of "My Community." Boston: Ginn & Co., 1939. Pp. vi+182. $0.72.

LAKE, CHARLES H., HARLEY, HENRY P., and WELTON, LOUIS E. *Exploring the World of Science.* New York: Silver Burdett Co., 1939 (revised). Pp. x+710. $1.80.

MCKINLEY, MABEL BURNS. *Famous Men and Women of Canada.* Toronto, Ontario: Longmans, Green & Co., 1938. Pp. 128. $0.80.

PACKARD, LEONARD O., SINNOTT, CHARLES P., and OVERTON, BRUCE. *The Nations Today: A Physical, Industrial, and Commercial Geography.* New York: Macmillan Co., 1939. Pp. viii+728. $2.00.

PHILLIPS, HARRY A., COCKEFAIR, EDGAR A., and GRAHAM, JAMES W. *Agriculture and Farm Life.* New York: Macmillan Co., 1939. Pp. xiv+496.

PITKIN, WALTER B., and HUGHES, HAROLD F. *Seeing Our Country,* Book I. New York: Macmillan Co., 1939. Pp. viii+386. $1.60.

PRATT, MARJORIE, and MEGHEN, MARY. *Read Another Story.* Chicago: Benj. H. Sanborn & Co., 1939. Pp. 94.

Thicker than Water: Stories of Family Life. Edited by W. Robert Wunsch and Edna Albers for the Commission on Human Relations of the Progressive Education Association. New York: D. Appleton-Century Co., Inc., 1939. Pp. xvi+360. $1.20.

THOMSON, WILLIS, and SOUBA, JANE. *Stories,* pp. iv+264, $0.96; *A Helping Book for Teachers To Accompany "Stories,"* pp. viii+76, $0.80. New York: Henry Holt & Co., 1939.

TURNER, C. E. *Principles of Health Education.* Boston: D. C. Heath & Co., 1939 (second edition). Pp. xvi+336. $2.00.

WADDELL, JOHN F., NEMEC, LOIS GADD, and BUSH, MAYBELL G. *Our Home.* New York: Macmillan Co., 1939. Pp. vi+126. $0.88.

WITTICK, EUGENE C. *The Development of Power.* Chicago: University of Chicago Press, 1939. Pp. xiv+164. $1.00.

PUBLICATIONS IN PAMPHLET FORM

The Administration and Organization of the Distributive Education Program. Bulletin 270. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 18.

ARNETT, TREVOR. *Trends in Tuition Fees in State and Endowed Colleges and Universities in the United States from 1928–29 through 1936–37.* Occasional Papers, No. 11. New York: General Education Board, 1939. Pp. xii+114.

BROWNELL, WILLIAM A., with the assistance of KENNETH G. KUEHNER and WILLIAM C. REIN. *Learning as Reorganization: An Experimental Study in Third-Grade Arithmetic.* Duke University Research Studies in Education, No. 3. Durham, North Carolina: Duke University Press, 1939. Pp. x+88+xx. $1.00.

BUTLER, NICHOLAS MURRAY. *Annual Report for 1938 of the Division of Intercourse and Education of the Carnegie Endowment for International Peace.* New York: Division of Intercourse and Education of the Carnegie Endowment for International Peace. Pp. 88.

COCKING, WALTER D., and GILMORE, CHARLES H. *Organization and Administration of Public Education.* Advisory Committee on Education, Staff Study No. 2. Washington: Government Printing Office, 1938. Pp. x+182. $0.20.

Developing Facility in English Composition: Principles Culled from Modern Approved Practice in Secondary Schools. Bulletin 281. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 16.

Education for Traffic Safety. Bulletin 390. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 24.

Gold Star List of American Fiction, 1823–1939: Six Hundred and Fourteen Titles Classified by Subject with Notes. Syracuse, New York: Syracuse Public Library, 1939. Pp. 34. $0.25.

JOHNSON, MARGUERITE WILKER. *Verbal Influences on Children's Behavior.* University of Michigan Monographs in Education, No. 1. Ann Arbor, Michigan: University of Michigan Press, 1939. Pp. x+192. $1.50.

The Seventh Yearbook of School Law, 1939. Edited by M. M. Chambers. Washington: American Council on Education, 1939. Pp. viii+200. $1.00.

SKODAK, MARIE. *Children in Foster Homes: A Study of Mental Development.* University of Iowa Studies in Child Welfare, Vol. XVI, No. 1. Iowa City, Iowa: University of Iowa, 1939. Pp. 156.

SOBEL, LOUIS H., and SAMLER, JOSEPH. *Group Methods in Vocational Guidance: With Specific Reference to the Economic Adjustment Problems of Jewish Youth.* New York: Furrow Press, 1938. Pp. 112. $0.75.

Suggestions for Developing a Social Studies Program in the Secondary School. Bulletin 411. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 32.

Summary of the 1939 Convention of the American Association of School Administrators. Washington: American Association of School Administrators, 1939. Pp. 32.

SWOPE, AMMON. Judgment Test on Safe Driving Practices. Bloomington, Illinois: McKnight & McKnight, 1939. $0.06.

The Teaching of Modern Foreign Languages in the Secondary Schools: French—German—Spanish—Italian. Bulletin 340. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 38.

THOMPSON, JAMES WESTFALL. *The Literacy of the Laity in the Middle Ages.*

University of California Publications in Education, Vol. IX. Berkeley, California: University of California Press, 1939. Pp. vi+198. $2.00.

The Use of the Radio in Parent Education. Report of a Study Conducted by the Child Study Association of America in Co-operation with the National Council of Parent Education and the National Advisory Council on Radio in Education, directed by Sidonie Matsner Gruenberg. Chicago: University of Chicago Press, 1939. Pp. xviii+94. $0.75.

Vocational High Schools: Trends and Forecasts. A Special Report Submitted with the Thirty-ninth Annual Report of the Superintendent of Schools, City of New York, School Year 1937–38. New York: Board of Education, 1939. Pp. xii+270.

Vocational Industrial Evening Classes: State Policy concerning Their Establishment, Operation, and Reimbursement. Bulletin 330. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 48.

WOELLNER, ROBERT CARLTON, and WOOD, M. AURILLA. *Requirements for Certification of Teachers and Administrators for Elementary Schools, Secondary Schools, Junior Colleges.* Chicago: University of Chicago Press, 1939 (fourth edition).

UNITED STATES OFFICE OF EDUCATION PUBLICATIONS:

Vocational Division, Leaflet No. 3, 1938 (revised)—*Teaching the Control of Loose Smuts of Wheat and Barley in Vocational Agriculture Classes.* Pp. iv+12. $0.05.

MISCELLANEOUS PUBLICATIONS

DUNLAP, JACK W. *Workbook in Statistical Method: With Special Reference to the Social Sciences.* New York: Prentice-Hall, Inc., 1939. Pp. x+146. $1.75.

Saber-Tooth Curriculum. Including Other Lectures in the History of Paleolithic Education, by J. Abner Peddiwell, Ph.D., as told to Raymond Wayne and Several Tequila Daisies, with a Foreword by Harold Benjamin. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xiv+140. $1.00.

WALLACK, WALTER M., KENDALL, GLENN M., and BRIGGS, HOWARD L. *Education within Prison Walls.* New York: Teachers College, Columbia University, 1939. Pp. viii+188. $2.25.

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Educational News and Editorial Comment

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Children in Uniform—The Making of Fascists

THE London *Times Educational Supplement* has begun the publication of a series of letters from special correspondents abroad, the purpose of which is to present a survey of the activities and plans of foreign school systems. The first of these letters, dealing with education in Italy, is of interest to American readers, and we quote a large portion of it. This item explains in more detail the plan of the recent School Charter, to which reference was made in the April number of the *Elementary School Journal.*

Italy seems to be following the example of Germany in certain aspects of her educational plans. A School Charter for the reform of education, which was approved by the Fascist Grand Council on February 15, lays down among other changes that labor in all its forms is to be considered a social duty. In all schools part of the instruction will take the form of periods of labor, in workshops or factories, on land or on sea. The charter, which will be applied between 1939 and 1941, will attempt to "shorten the distances between social classes." . . . .

As Professor Finer rightly remarks, one may say that every school has been converted into a subbranch of the Fascist party. The portraits of Duce and King, side by side with the crucifix, decorate every room. Every school has a flag run up each day to the singing of the Fascist anthem. Each classroom is named after a Fascist martyr. There are commemorative altars and marble tablets, and a Flame of Remembrance to Fascist martyrs of the neighborhood.

The boys mount guard over them on Fascist anniversaries. The school lives in a perpetual round of celebrations, songs, parades, and harangues, kept up to fever pitch by the local party secretary, the ministry's inspectors, and the organizers of the Association of the Schools. First the Duce, then the Regime, then Italy, then the individual Italian, then the rest of the world!

From the age of six to twenty-one, young Italians are brought up in a heroic atmosphere, and the only noteworthy feature of the school, as this has been modeled by fascism up to today, is its sporting-military organization. The Opera Nazionale Balilla, which the Duce has defined as the "pupil of the Regime's eye" was created in 1926. It ropes in all boys from eight to fourteen years of age in the Balilla, and from fourteen to eighteen years of age in the Avanguardisti. Between the ages of eighteen and twenty-one the youths are enrolled in the so-called Fasci Giovanili di Combattimento. Those frequenting the universities have their own special organization called the G.U.F. (Fascist University Groups). The "Fascist Levy," which is represented as a return to the old customs and traditions of the *toga virilis*, marks the solemn passage from the youthful formations of the Balilla, Avanguardisti, and Fasci Giovanili di Combattimento to those of the party and of the Militia. Special academies have been instituted at Rome and Orvieto to prepare the masters of these school barracks, in which a preponderant importance is given to physical training, military exercises, and parades.

As to the teaching, this is based on state textbooks, even in private schools. These glorify the soldierly and all the heroic virtues: they rewrite history according to Fascist views and aim only at exalting to the point of fanaticism the national sentiment. The teachers, who in the elementary schools have to wear the black shirt during lessons, must, of course, be Fascists, and all that they say and do, in school and out of school, is closely watched and noted by functionaries of the party. As is known, the university professors have since 1932 had to take the oath of "loyalty to the Regime." All the teachers and professors, divided into five sections, must belong to the Associazione Fascista della Scuola, which is presided over by the secretary of the Fascist party.

The results given by this militarized school have so far not been very good. In the middle schools especially, the boys, tired from their military training, study little and badly. Unbiased observers agree in stating that there is no comparison between the fruits which, from the standpoint of mental education, the school gave under the Liberal regime and those which it gives under the Fascist regime. In the last few years discontent has been steadily increasing. Hence the necessity for a new reform of the school, which has just been introduced by Signor Bottai, minister of education. So far only its fundamental principles and broad outlines have been announced.

Under the reform, which, it is declared, is not a reform in the system but of the system, the elementary system is organized as follows: maternal school (corresponding to the kindergarten), lasting two years; the true and proper elementary school, lasting three years; and the labor school, lasting two years.

Attendance at the maternal school begins at the age of four; at eleven years the boy has three paths open to him: if he does not intend to go on to higher studies, he may enter the professional school (three years) or the technical school (two years). If he does intend to continue, he enters the middle school, which, unlike the present middle school with its divisions of classical, technical, and normal schools, is unified, lasts three years, and has as a basis the teaching of Latin, a "factor of moral and mental formation." The boys leave the middle school at fourteen years and may then choose between several paths: the classical school, which is intended to be reserved only to the most intelligent and promising pupils; the scientific school; the normal school, which provides preparation for higher teaching; the technical-commercial institute. Each of these courses lasts five years; that at the institute for agrarian and industrial specialists lasts four years.

This new organization will be effected during the next three years, and will follow the principles laid down in the twenty-nine "declarations" or sections which form the charter. One of the noteworthy and new features is the introduction of manual labor, which begins in the last two classes of the elementary school and continues up to the university, with the object of "educating the social and productive conscience which is typical of the corporative order." But what is really noteworthy in the reform is not so much its particular details as the general spirit by which it is inspired.

The *Educational Supplement* comments editorially on the lesson that Englishmen may learn from educational policy in Italy and Germany. These comments are as significant for Americans as for Englishmen.

The problem is baffling, as much in the theoretical as in the practical sphere. Catchwords will not help, especially where they are political catchwords. There is much talk of educating for democracy: but belief in freedom, in government by talking, in personal liberty are not the same thing as belief in democracy. The former beliefs may furnish a creed and a cause for youth; the latter cannot. It makes no appeal to the emotions of the young. It may be that our belief in freedom and representative government would be more genuine if, at some stage in the education of our youth, they shared a common experience of work and discipline, in which class distinctions and regional differences would fall away and boys and girls would learn to reconcile respect for human personality with the claims of the community. It is this reconciliation that the truly democratic education must seek. It is doubtful whether it will come in the classroom or even in the playing field. It comes sooner in the camp, the countryside, the ship, and the workshop. It is in their use of such opportunities that the totalitarians have something to teach us. The German labor camp and physical-training campaign, for example—both offshoots of pre-Nazi Germany—are among the great educational achievements of the century. Whether they be

Italians or Russians, idealists or materialists, these dogmatists know what they want, have inspired youth, and have given education a prestige which it certainly does not enjoy in Whitehall. We need not imitate them; we may adapt from them, as they have adapted from us. Whatever we adapt, we shall remember that strength of character is not achieved by the enslavement of the mind.

The Problems of Rural Education in America and Abroad

THE problems of rural education are assuming increasing importance in most of the nations of the world today. As industrial development takes place and great urban communities arise, the rural hinterland is almost certain to enter a stage of progressive depletion of both its human and its natural resources. If this process is allowed to go too far, the whole fabric of the social order is threatened. In all the great industrial, urban civilizations the problem of maintaining a balance between rural and urban life, of preventing the rural economy and rural institutions from falling into decay is pressing. A program of education properly conceived and carried out can be made to contribute much to the solution of the problem.

A recent volume, *Educational Yearbook of the International Institute of Teachers College, Columbia University, 1938*, is devoted to a discussion of the problems of rural education in the following countries: Argentine Republic, Australia, Brazil, Canada, China, Czechoslovakia, Denmark, England, France, Germany, India, Mexico, Norway, and the United States. The following general statement with respect to rural education and rural society is quoted from the introductory statement of the editor of the yearbook, Professor I. L. Kandel, of Teachers College, Columbia University.

> The attention which has been devoted to the problem during recent years has been stimulated as much by changes in social and economic conditions as by educational considerations. There are few countries that are not affected by the phenomenon of a growing exodus from the rural areas. This exodus has been increased not only by changes in methods of agriculture, which have made the lot of the small farmer increasingly difficult, and by the growing intensity of competition in the world-markets, but also by the assumed advantages of urban over rural life. . . . .
>
> If little has been done in the way of social legislation to equate rural and urban conditions of life, to improve the standards of living and of well-being of rural populations, still less may be claimed in the field of education. Com-

pulsory education has, it is true, been extended to rural areas in most of the advanced countries of the world, but paradoxically enough it has been neglected in those countries which have the largest rural populations and it is in these countries where the incidence of illiteracy is highest, where the methods of gaining a livelihood are still primitive, and where the standards of living are the lowest. But even in many of the countries where compulsory education has been enacted, the laws are not enforced because of lack of school buildings and shortage of teachers, both due to inadequate methods of financing education. Where the state assumes responsibility for the provision and support of education, attention is devoted first to the needs of the urban areas, while in countries where the responsibility for such provision and support is left to local authorities, these are often too poor to raise sufficient funds for adequate school buildings or for the salaries of adequately prepared teachers. Even in a country as wealthy as the United States, the taxable property is so unevenly distributed that the solution which in the opinion of many is the only one possible is the pooling of the resources of the nation as a whole in order to provide federal subsidies to make equality of educational opportunity at all available.

The availability of funds for the provision and support of rural education is not, however, the only cause of its weakness or strength. There are educational systems in which the central authority virtually assumes complete control of education, is responsible for the provision of school buildings, and equalizes opportunities at least to the extent of appointing to rural schools teachers with the same qualifications and preparation as teachers in urban schools. Nevertheless the quality of rural education under such conditions is not greatly superior to that given in systems where local control is dominant. The reason for this is that it is not enough to assimilate rural to urban school conditions; education, if it is to be successful and to have meaning for the pupils concerned, must be adapted to the environment in which the pupils live and grow. . . . .

If the principle is sound that the task of modern education is to adapt instruction to the abilities and capacities of pupils, to build on the environment in which they live, and to extend and enrich that environment, the content of a rural education must inevitably be taken from and adapted to the rural environment. This does not mean a policy of constricting pupils to the environment in which they happen to be living, but it does mean that the work and content of school work must be in a language that has meaning for the learner. If rural children are not to be deprived of their right to equality of educational opportunity in accordance with their abilities, the difference between a rural and urban school should be a difference in methods of approach converging ultimately to the same educational ends. It will mean that just as the modern urban school should have adequate equipment for a variety of instruction and for recreational activities, so the rural school should have corresponding equipment adapted to its needs. A rural school, for instance, which does not have a plot of land and domestic animals by means of which the pupils may become intelligent about the processes and activities going on around them, cannot prop-

erly fulfil its educational task. To initiate pupils in school into these processes and activities is not an argument for vocational rural education; it is an argument for the maintenance of those relations which should exist between school and society. Such an approach to the realities of the environment not only contributes to a sounder intellectual, emotional, and social education; it provides a better and more intelligible method for enlisting the interest of parents and public in the work of the school than does the somewhat negative functions of a school committee deprived of all duties except that of looking after school attendance. . . . .

Rural education is discussed in the present volume from so many different points of view and from so many different levels of social and cultural conditions that almost every issue in a vast and complicated problem is considered. It is not suggested that rural education is a unique problem; those who look for first principles will find the implication throughout the volume that rural, like all the other forms of education, must arise out of and be adapted to the environment which it serves and at the same time must contribute to raising that environment to a higher and richer cultural and social level. In this task, however, the school must not only have the co-operation but even become the focus of all other services devoted to the improvement of the physical, cultural, and economic standards of rural communities in the interests of their own as well as of national welfare.

Personal Liability of Principals and Teachers for Injuries Sustained by Pupils

Within recent years the issue of the personal liability of a school principal or teacher for injuries sustained by pupils has been raised in more than one state. This issue is of vital importance because it bears directly on the instructional program of the school. If teachers are held personally liable for injuries to pupils, it may be expected that they will hesitate to make use of the educational facilities in the community which require personal visitation on the part of the pupils. Teachers who may wish to take their classes to visit the museum, the city hall, the public library, or some other social agency in the community simply will not do it in face of a possible suit for damages in case a pupil happens to meet with an accident. Fortunately the courts have established principles of law governing the personal liability of teachers under such circumstances which afford almost, if not quite, complete protection. The general rule governing the liability of a teacher having the custody of a pupil is that the teacher is bound to use reasonable care and dili-

gence. What is reasonable care depends on the circumstances of each particular case—the age of the pupil, the hazards surrounding the activity, and the like. Where a teacher takes the care and the precautions that a reasonably prudent person would take under similar circumstances, there is little probability that a court will hold him liable for any accidental injury to a pupil in his custody.

The Court of Appeals of New York has recently handed down a decision which is important in this connection. A pupil who suffered an injury in the school building entered a suit for damages against the principal personally. In the Appellate Division of the Supreme Court the plaintiff won, but on appeal the judgment was reversed. The opinion of the Court of Appeals is quoted in its entirety.[1]

Plaintiff, a girl fourteen years of age, was a pupil in a public school in New York City of which Defendant Burger was principal. While descending an outside stairway of the school with her class, which consisted of twenty-four or twenty-five children, and as she reached the third or fourth step from the yard, one of the boys in the class, running down the stairway, collided with her and caused her to fall and to sustain injury. The complaint is based upon "defendant's negligence in allowing overcrowding to take place and to permit roughing by large boys, wholly without any supervision whatsoever." The girls first descended the stairway and the boys followed, running down and passing the girls. The Appellate Division, in affirming the judgment against this appellant, held that a question of fact was presented whether he was negligent in failing to promulgate more adequate regulations for the safety of the pupils. The teacher who exercised direct supervision over this class at the time of the accident is the defendant Loretta I. Delaney, concerning whom the Appellate Division holds: "There was no proof of negligence on the part of the teacher." (255 App. Div. 786, 6 N.Y.S. [2d] 921, 922.)

Following is a summary of the evidence of supervision by Appellant Burger: "(*A*) In supervising the teachers: (1) He held regular conferences with his thirty-four teachers. Egress and ingress of pupils, dismissal of classes, and safety contrivances were discussed and rules were laid down. Each conference lasted one hour; (2) He established the rule that the teacher was to see to the entire dismissal of her class; (3) He directed teachers to place themselves in 'strategic' positions during dismissals; (4) He instructed teachers, in the use of their discretion as to being in the lead, or in the middle or in the rear of the class, according to where she would find the greater control of the class; (5) He instructed teachers to admonish pupils against jostling and any other behavior not conducive to their safety. (*B*) In supervising the school as a whole: (1) He

[1] *Thompson et al.* v. *Board of Education of City of New York et al.*, 19 N.E. (2d) 796.

personally observed dismissals; (2) He regularly inspected the stairways and corridors; (3) He shut down stairways he found unsafe until repaired; (4) He directed the children to go down that stairway which gave promptest and safest egress; (5) He forbade the use of outer stairways in inclement weather; (6) He followed the general course of practice in all well-regulated schools. (*C*) In supervising the class in which the plaintiff was a pupil: (1) He placed a mature teacher of twenty-nine years' experience in charge; (2) He limited this class to only twenty-five pupils whereas the other two classes in the same grade had thirty-seven pupils each; (3) He modified the program of this class to avoid the loss of time because these pupils were behind in their studies, having missed work through absence, illness, or change of school; (4) He provided, for this class, almost the private use of a stairway avoiding the heavy traffic on the common inside stairway. (*D*) In supervising the pupils: (1) He personally admonished children whenever he saw any unruliness on exits, talking to them in his own office; (2) He spoke to the teacher when he was not satisfied with the dismissal; (3) He sent for the parent to come to his office, whenever any child needed such co-operation."

There were about fifteen girls and nine boys in the class. Plaintiff testified that there was a double line of girls who first descended and the boys followed. The teacher, the defendant Miss Delaney, testified that she took the girls out to the first landing, looked over the rail of the landing and saw the head of the column reach the ground. Then she walked part way down with the boys who were going down in an orderly way. She noticed that one of the boys was missing and went back to get him. It was while she was thus temporarily absent that the accident occurred.

From the evidence in the case the fact seems certain that Defendant Burger, the principal, exercised such general supervision as was possible. The teacher was competent, and the court below absolved her from the charge of negligence. Appellant could not personally attend to each class at the same time, nor was any such duty imposed upon him. (*Peterson* v. *City of New York*, 267 N.Y. 204, 196 N.E. 27; *Curcio* v. *City of New York*, 275 N.Y. 20, 24; 9 N.E. [2d] 760.)

The judgments should be reversed and the complaint dismissed, with costs in all courts.

A similar case came before the Supreme Court of Michigan in 1936. In a regularly required course in nature-study the teacher directed a pupil to water some plants. The pupil fell and was injured on the glass of the broken container. The court, in refusing damages against the teacher, took a position which most courts would no doubt follow. It said in part:[1]

We have reviewed the record in this case and find no testimony tending to establish even ordinary negligence. The act which plaintiff was requested or

[1] *Gaincott* v. *Davis*, 281 Mich. 515, 275 N.W. 229.

directed by defendant to perform was in the regular course of the school activities. There was nothing in the nature of the act itself or the instrumentalities with which plaintiff was permitted to perform the act which would lead a reasonably careful and prudent person to anticipate that the child's safety or welfare was endangered in the performance of the act. The mere fact an accident happened, and one that was unfortunate, does not render defendant liable.

"In the case of conduct merely negligent the question of negligence itself will depend upon the further question whether injurious results should be expected to flow from the particular act. The act, in other words, becomes negligent, in a legal sense, by reason of the ability of a prudent man, in the exercise of ordinary care, to foresee that harmful results will follow its commission." (*Drum* v. *Miller*, 135 N.C. 204, 47 S.E. 421.)

At least in a limited sense the relation of a teacher to a pupil is that of one *in loco parentis*. We are not here concerned with the law applicable to punishment of a pupil by a teacher; but rather with the law applicable to the duties of a teacher in the care and custody of a pupil. In the faithful discharge of such duties the teacher is bound to use reasonable care, tested in the light of the existing relationship. If, through negligence, the teacher is guilty of a breach of such duty and in consequence thereof a pupil suffers injury, liability results. It is not essential to such liability that the teacher's negligence should be so extreme as to be wanton and wilful.

As hereinbefore noted, a thorough review of this record fails to disclose any testimony leading to establish actionable negligence on the part of the defendant.

One other case which was decided by the Appellate Court of Indiana in 1936 may also be cited in this connection. A pupil was injured in a fall from a slide which was part of the playground equipment of the school. Action for damages was brought against the superintendent of schools and the athletic director, the contention being that both were negligent in the construction and the maintenance of the slide. The court refused damages, saying in part:[1]

Of course, the teachers (the superintendent and coach) cannot be liable unless it be shown that they individually were guilty of the active negligence which caused the wrong. There is no evidence that they did or failed to do any act which was directly responsible for the injury. There is no showing that it was the duty of any one of the three to make a daily or periodical inspection of this particular slide or playground equipment. . . . . Even though they should be guilty of negligence, whether or not the law provides a remedy is still another question and not before us here.

[1] *Medsker et al.* v. *Etchison*, 101 Ind. App. 369, 199 N.E. 429.

Second Annual Conference on Reading

THE second annual conference on reading at the University of Chicago was announced briefly in the May number of the *Elementary School Journal.* The conference will be held in Mandel Hall, June 21–24, inclusive. The central theme of the conference is "Taking Inventory of Recent Developments in Reading." A copy of the program follows.

Wednesday Morning, June 21

General Session: "The Expanding Role of Reading in General Education," William S. Gray, Professor of Education, University of Chicago

"The Relation of Reading to the School Curriculum," Bess Goodykoontz, Assistant Commissioner of Education, United States Office of Education

Sectional Meetings: "The Development of Basic Reading Attitudes and Habits"

1. Elementary School
   a) "Current Issues Relating to Basic Instruction in Reading," Bernice E. Leary, Research Specialist in Reading, University of Chicago (Summer, 1939)
   b) "Characteristics of a Sound Basic Reading Program," Gertrude Whipple, Associate Professor of Education, Wayne University, and Supervisor of Reading, Detroit Public Schools
2. High School and Junior College
   a) "The Relation of Language Arts to the Improvement of Reading," Evalyn Bayle, Head of English Department (1929–38), Oberlin High School, Oberlin, Ohio
   b) "The Reading Program at Stephens College," Roy Ivan Johnson, Director of the Division of Skills and Techniques, Stephens College, Columbia Missouri

Wednesday Afternoon, June 21

General Session: "The Semantic Approach to Meaning and Its Application to Various Levels of General Education," Paul B. Diederich, Assistant Professor of Education, University of Chicago

Sectional Meetings:

1. Primary Grades
   a) "Reading Readiness," Ethel Mabie Falk, Formerly Director of the Curriculum, Public Schools, Madison, Wisconsin
   b) "Developing Meaningful Concepts in Reading," Grace E. Storm, Assistant Professor of Kindergarten-Primary Education, University of Chicago

2. Intermediate Grades
   a) "Organizing Basic Instruction in Reading According to the Levels of Achievement of Pupils," Mary L. Starkey, Assistant Principal, Junior High School, and Supervisor of Reading, Sandusky, Ohio
   b) "Enlarging and Enriching Meaning Vocabularies in Reading," Delia E. Kibbe, Supervisor of Elementary Education, State Department of Public Instruction, Madison, Wisconsin
3. High School and Junior College
   a) "The Basic Division of the Kinds of Reading," Mortimer J. Adler, Associate Professor of the Philosophy of Law, University of Chicago
   b) "The Three-Year Program of Reading, Writing, and Criticism in the College, the University of Chicago," Cecil F. Denton, Teacher of English, University High School, University of Chicago

Wednesday Evening, June 21

Round-table discussion of basic reading problems under the direction of William S. Gray. Questions and controversial issues proposed by members of the conference will be discussed from the platform by the speakers of the day and by others and will be supplemented by contributions from the audience.

Thursday Morning, June 22

GENERAL SESSION: "The Nature and Causation of Disabilities in Reading," Walter F. Dearborn, Professor of Education, and Director of the Psychoeducational Clinic, Graduate School of Education, Harvard University

SECTIONAL MEETINGS:

1. Elementary School
   a) "The Diagnostic and Remedial Procedures of an Adjustment Teacher," Thelma F. Hicks, Adjustment Teacher, Amelia Dunne Hookway School, Chicago, Illinois
   b) "Types of Deficient Readers and Their Treatment," Helen M. Robinson, Superintendent and Psychologist, Orthogenic School, University of Chicago
   c) "Methods and Devices in Remedial Reading," Augusta Jameson, Psychologist, Institute for Juvenile Research, Chicago, Illinois
2. High School and Junior College
   a) "Provisions for Poor Readers in the Riverside-Brookfield High School," Dale B. Vetter, Teacher of English and Remedial Reading, Riverside-Brookfield High School, Riverside, Illinois
   b) "The Remedial Program of Armour Institute," Anna C. Orcutt, Psychologist, Armour Institute of Technology, Chicago, Illinois
   c) "Recent Experimental Studies in Remedial Reading," Guy T. Buswell, Professor of Educational Psychology, University of Chicago

Thursday Afternoon, June 22

GENERAL SESSION: "Remedial Reading: Case Histories and Recent Experimentation," Walter F. Dearborn, Professor of Education and Director of the Psycho-educational Clinic, Graduate School of Education, Harvard University

"The Interest Factor in Remedial Reading," Paul A. Witty, Professor of Education, Northwestern University

"The Organization of Remedial Facilities in a School System," Alathena J. Smith, Psychologist and Case Worker, Public Schools, Shorewood, Wisconsin

Demonstration of instruments used in diagnosis and remediation, William S. Gray and Helen M. Robinson

Thursday Evening, June 22

"Emotional Disturbances and Reading Disability," Mandel Sherman, Associate Professor of Educational Psychology, University of Chicago

"Visual Difficulties and Reading Disability," Louise Farwell Davis, Director of Research, National College of Education, Evanston, Illinois

Friday Morning, June 23

GENERAL SESSION: "Current Issues Relating to Reading in the Various Curriculum Fields," Ernest Horn, Professor of Education, University of Iowa

SECTIONAL MEETINGS:

1. Primary Grades
   a) "Reading in an Integrated Guidance Program," Ethel Kawin, Director of Guidance, Public Schools, Glencoe, Illinois
   b) "Reading To Promote Literary Appreciation," Laura Oftedal, University Elementary School, University of Chicago
2. Intermediate Grades
   a) "Guidance in Reading in Elementary Science," Bertha M. Parker, Teacher of Science, Laboratory Schools, University of Chicago
   b) "Three Problems in Reading Social-Studies Materials," Mary G. Kelty, Author and Specialist in the Social Studies (Intermediate Grades), Chicago, Illinois
3. High School and Junior College
   a) "Reading Problems in the Field of English," Wilfred Eberhart, Assistant Professor of Education, University of Chicago
   b) "Types of Reading Guidance Essential in Mathematics," Maurice L. Hartung, Assistant Professor of Education, University of Chicago

Friday Afternoon, June 23

GENERAL SESSION: "Relationships between Reading and Other Aids to Learning," Edgar Dale, Associate Professor of Education, Ohio State University

SECTIONAL MEETINGS:

1. Primary Grades
   a) "Reading To Promote Understanding in the Social Studies," Hannah M. Lindahl, Supervisor of Elementary Education, Public Schools, Mishawaka, Indiana
   b) "Reading To Promote Understanding of Elementary Science Units," Glenn O. Blough, Teacher of Science, Laboratory Schools, University of Chicago
2. Intermediate Grades
   a) "Cultivating Reading Abilities in Arithmetic," Harry O. Gillet, Principal, University Elementary School, University of Chicago
   b) "Reading Problems in Geography," Edith P. Parker, Assistant Professor of the Teaching of Geography, University of Chicago
3. High School and Junior College
   a) "Promoting Good Habits of Reading in the Social Sciences," Ernest Horn, Professor of Education, University of Iowa
   b) "Promoting Growth in Reading and Study in Science," Wilbur L. Beauchamp, Assistant Professor of the Teaching of Science, University of Chicago

Friday Evening, June 23

Round-table discussion of reading problems in the various curriculum fields under the direction of William S. Gray. Questions and controversial issues proposed by members of the conference will be discussed from the platform by the speakers of the day and by others and will be supplemented by contributions from the audience.

Saturday Morning, June 24

GENERAL SESSION: "Current Issues Relating to the Development of Reading Interests and Tastes," Dora V. Smith, Professor of Education, University of Minnesota

SECTIONAL MEETINGS:

1. Elementary School
   a) "Adjusting Books to Children's Interests and Abilities," Bernice E. Leary, Research Specialist in Reading, University of Chicago (Summer, 1939)
   b) "Problems of Reading Guidance," Dora V. Smith, Professor of Education, University of Minnesota
2. High School and Junior College
   a) "The Function of Reading Guidance," Dora V. Smith, Professor of Education, University of Minnesota
   b) "The Reading of Newspapers and Magazines," Edgar Dale, Associate Professor of Education, Ohio State University

Saturday Afternoon, June 24

SECTIONAL MEETINGS:

1. Elementary School
   "The Functioning Elementary-School Library," Nora E. Beust, Specialist in School Libraries, United States Office of Education
2. High School and Junior College
   "The Functioning Library in High Schools and Colleges," C. Irene Hayner, University of Illinois Library School

GENERAL SESSION: "Summary of the Conference"

General Sessions, William S. Gray
Primary-Grade Level, Grace E. Storm
Intermediate-Grade Level, Bernice E. Leary
High-School and Junior-College Levels, Edgar Dale

WHO'S WHO FOR JUNE

The authors of articles in the current issue H. K. BENNETT, regional supervisor, Iowa State Department of Public Instruction. W. C. KVARACEUS, educational consultant of the public schools in Brockton, Massachusetts. O. L. HARVEY, engaged in research in Washington, D.C. CHARLES MAHAKIAN, teacher in the Tompkins School, Oakland, California. ROBERT KING HALL, master of mathematics at Cranbrook School, Bloomfield Hills, Michigan, and special lecturer at the University of Michigan in conjunction with the summer Institute of Latin-American Studies. JAMES F. ABEL, chief of the Division of Comparative Education of the United States Office of Education.

The writers of reviews in the current issue ARTHUR S. GIST, president of Humboldt State College, Arcata, California. GEORGE A. WORKS, professor of education and dean of students at the University of Chicago. WILLIAM S. GRAY, professor of education at the University of Chicago. R. E. SWINDLER, instructor in education at the University of Virginia. GRACE E. STORM, assistant professor of kindergarten-primary education at the University of Chicago. BURR W. PHILLIPS, assistant professor in the teaching of history at the University of Wisconsin. HANNAH LOGASA, teacher and librarian in the University High School, University of Chicago.

A STATE PROGRAM FOR THE IMPROVEMENT OF INSTRUCTION IN READING

H. K. BENNETT
Iowa State Department of Public Instruction

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PREVIOUS to the year 1935 field service in the Iowa State Department of Public Instruction was organized largely as an inspectional service. The work of each of the field men was then confined to types of schools, there being an inspector of consolidated schools, an inspector of mining-camp schools, an inspector of normal-training schools, an inspector of approved tuition schools, and an inspector of rural schools. Each worker served the state as a whole in the particular type of schools for which he or she was responsible. Beginning in 1935 this field service was reorganized on a regional basis, and each worker was made responsible for all types of schools within the counties in a given area—approximately a fourth of the state in each case. This arrangement applied to all field workers except the normal-training supervisor and the rural-school supervisor, both of whom continued on the old basis.

The purpose of this reorganization was to limit the extent of the territory covered by each worker, to fix more definitely the responsibility of each worker with reference to the territory covered, and to render a different type of service than had previously been given. Because of the limitation and the careful definition of his territory, each worker had a keener sense of responsibility for his schools. This arrangement also made it possible for each worker to centralize his efforts and thus give more attention to the improvement of instruction on both a county-wide and a regional basis.

During the school year 1935–36 the regional supervisors, in connection with their regular visitation work, gave much attention to classroom instruction. A half-day was spent in visiting each school, and a large part of this time was devoted to classroom visitation. Particular notice was given to the nature of the supervisory pro-

gram, and careful observations were made concerning the nature of the classroom instruction. In the smaller schools it was possible to spend time in the classroom of each teacher, while in the larger schools the rooms which were visited were selected at random. The supervisors also spent much time in conference with the superintendents and with some of the teachers in each system, in order to get a better understanding of the supervisory program.

As a result of these observations and conferences, some definite conclusions were drawn with respect to what should be done to bring about improvement in the instructional program in the elementary grades. Chief among these was the need for a concentrated drive on the functional development of work-type reading skills in the content subjects in the intermediate grades. There appeared to be an almost universal lack of understanding of the real purpose of work-type readers in the reading program and a still greater lack of understanding of the functional value in the content subjects of the skills that these readers are designed to develop. There also appeared to be three important inhibiting factors so far as the functional use of these skills was concerned: (1) a lack of understanding on the part of the teachers of how to develop and use these skills, (2) the lack of a supervisory program dealing with the problem, and (3) the lack of a flexible organization within the system to provide for supervised study.

A PLAN OF ATTACK

For attack on the problem from the viewpoint of the State Department, it was necessary to think in terms of the county as a unit, since the funds available for improvement of instruction in this state are administered through the office of the county superintendent. Consequently the program was organized to function as a county-wide plan rather than as a state-wide plan. In some counties the program involved both city schools and rural schools, while in others only the city schools participated.

Since this attack was the first attempt in the state to develop such a reading program, it was necessary to plan carefully a testing and a remedial procedure, the results of which could not be questioned from the standpoint of accuracy and validity. The plan called for the administration of the Iowa Silent Reading Tests in the spring of

1936. During the school year 1936–37 a remedial program was carried out which was planned by the State Department and which was administered through the county superintendent and the city superintendents in the counties involved. The remedial program was to be followed in the spring of 1937 by the administration of the opposite form of the same test as a check on the effectiveness of the procedure.

It was thought best not to attempt, at first, to carry the plan out in too many counties. Consequently three counties were selected from northeast Iowa and three from northwest Iowa.

A CO-OPERATIVE ENTERPRISE

In order that the reliability of the results of the program would be accepted without question, arrangements were made to have the tests administered and scored by disinterested, competent parties. The Extension Service at Iowa State Teachers College, Cedar Falls, Iowa, provided skilled educators, with extensive experience in the testing field, who administered the tests in all the schools. This same department also provided the scoring service. The tests were both administered and scored by the same disinterested parties for all the schools involved in each region. The Extension Service at the University of Iowa also assisted by doing all the statistical work and by preparing a report of results by counties. These services relieved the State Department of all responsibility so far as the testing and the statistical treatment of the data were concerned. The time of the department workers was thus freed for the development of a remedial program.

THE REMEDIAL PROGRAM

The initial step in the remedial program was to hold a county-wide meeting of the teachers from all schools in the county who were responsible for the grades involved. The work covered Grades IV–VIII in northeast Iowa and Grades IV–VI in northwest Iowa.

At this meeting the nature of the remedial program was carefully explained, and the initial remedial material was distributed. On the basis of the statistical returns from the University of Iowa, large profile charts for each grade in each school were prepared. These profiles, based on the average of the class for each part of the test,

were large enough to be read at some distance. They were specially prepared enlargements of the individual pupil profiles provided on the back of the test booklet. The statistical report, the class profile, and the test booklets with the individual profiles were distributed at this meeting, and some time was spent in interpreting for the teachers the results of the tests. The presentation of the test results served as a basis for outlining the remedial program which was to follow. The details of this program had been worked out during the summer months by the regional supervisors in the regions involved.

The core of the remedial program was based on a careful analysis of the work-type readers in common use in the state. This analysis was organized around the four major silent-reading abilities involving the skills required in comprehending what is read, organizing what is read, remembering what is read, and locating information. Several sets of work-type readers were analyzed. Under each ability the various skills were listed, and under each skill teaching procedures for developing the skill were described. A twelve-page outline was prepared, which, among other things, included a motivation chart with space for listing the names of those pupils who had become proficient in the application of a certain skill to their daily work.

The vital part of this remedial program was centered in the idea of making these skills function in the content subjects. The program was designed, therefore, for the purpose of getting teachers to prepare their own remedial exercises in those subjects. At the same time the teachers were encouraged to carry on the regular work-type reading program in that part of the reading period, and the importance of carrying these skills over into the content subjects was emphasized.

Supplementing the circulars which have just been described, a set of sample exercises was prepared to illustrate how the suggestions made in the circulars could be put into practice. These sample exercises were based on textbooks in use in the state in the fields of history and geography. This material was illustrative of the types of exercises that a teacher would prepare for a supervised-study period. Therefore, the importance of flexibility in the organization of the school to provide longer periods for supervised study was stressed, even though the study periods might come at less frequent intervals.

The remedial material distributed at the initial meeting consisted of the analysis of work-type readers and the sample exercises to accompany this analysis, together with the test results and the profiles previously described. Ample time was taken to explain the material, and teachers and superintendents were given an opportunity to raise questions.

DEMONSTRATORS USED

After this meeting an extension worker from the Iowa State Teachers College at Cedar Falls, Iowa, spent a half-day in each school demonstrating the use of the remedial material. In his demonstrations he used exercises which he had prepared in the fields of history and geography and which were based on the analysis of the work-type readers previously described. Seventeen type lessons were prepared. Copies of each were left with the teachers, and as many of them were demonstrated as time would permit. The demonstration work was entirely confined to sixth-grade pupils. Usually arrangements were made so that all other teachers on the elementary-school staff could observe the demonstration. After the demonstration a conference was held at which the teachers were given opportunities to raise questions. Some time was also taken to emphasize important points which should be stressed in the program.

After these meetings two circulars were mailed to the superintendent in each school in sufficient number to provide each teacher with copies. One of these gave suggestions for developing speed and comprehension in work-type reading. The necessary steps for developing exercises of this kind were described, and suggestions for progress charts were included so that these exercises could be given at regular intervals and the progress of each child charted. The second circular consisted of a summary of the points to be stressed in the program and included a list of needed equipment. The points discussed were the use of single copies of readers for audience reading, the use of sets of work-type readers, the place of the content-subject textbooks in the program, the use of the sample exercises keyed to the analysis, the use of the motivation charts, a discussion of a time schedule to provide for directed study, and the use of the differentiated assignment to care for individual differences. In addi-

tion, a section was also devoted to a discussion of the place of the workbook in this remedial program. This section was included in reply to the protest from some teachers that the workbook could be used to displace the remedial program.

FOLLOW-UP PROGRAM

Later in the year two questionnaires were prepared, one to be answered by classroom teachers and the other to be answered by the superintendent. The first was used to secure from the teachers reports of their progress and to give them opportunity to list the problems with which they were having trouble. In the case of the superintendents the intent of the questionnaire was to obtain information about what they were doing in a supervisory way and also to give them opportunity to list their supervisory problems. Approximately 90 per cent of these inquiries were returned.

The information on these questionnaires provided the basis for a follow-up program, and another county-wide meeting was held in each county. At this meeting a classroom teacher demonstrated how the work-type reading skills might be developed in connection with a unit assignment in sixth-grade history. For this purpose use was made of the last unit in the sixth-grade state course of study in upper-grade history dealing with old-world backgrounds. The demonstration, lasting about an hour, was put on at a general meeting before all the teachers in the county involved in the program. The unit was prepared in mimeographed form and included a list of objectives for teacher and pupils, a motivation narrative, a list of study skills to be developed, a vocabulary list to be developed from the context, and a list of study exercises dealing with the academic phase and another dealing with the activities phase. The unit was also organized to provide for the individual differences in the group.

In addition to the demonstration meeting, additional meetings were held, one for the teachers and one for the superintendents. These meetings were held simultaneously and were organized as panel discussions. The topics were selected and assigned on the basis of the questionnaire returns. The emphasis in the teachers' meeting was on the remedial program, while the superintendents' meeting dealt with the problems of supervising the program.

After the panel discussion in the superintendents' meeting, the regional supervisor presented a suggestive supervisory bulletin which the superintendents might use in their own systems. It contained suggestions for a program covering a six-week period, with definite proposals for administering the program.

No further effort was made by the State Department to present remedial material or suggestions of a supervisory nature. Each school continued with its own program without interference until early in April, when the retest was administered to measure the progress made. These tests were again administered by the same extension worker from Cedar Falls and were scored by the same group who had scored the pretests. The same service for statistical treatment of the results was provided by the Extension Service of the University of Iowa.

In order to obtain information relative to the effectiveness of this program, the research department worked out a frequency distribution of the scores for the three counties in northeast Iowa. The scores were carefully checked to make sure that only the scores of pupils who had taken both tests were included. In other words, the scores in both frequency distributions in each grade are for identical pupils.

Table 1 indicates the results of the pretest and the final test for the four upper grades in the town, city, and consolidated schools in three counties in Iowa. The pretest was given during the first week in May in two counties and in the latter part of September in one county. The final test was administered in the first week in April. The average time elapsing between tests was approximately ten months, while the actual school time was less than eight months. The actual working time for remedial instruction was six months.

For Grade V a growth in reading age of twenty-one months is indicated; for Grade VI, twenty-one months; for Grade VII, eighteen months; and for Grade VIII, nine months. A normal gain for each would be approximately nine months as indicated by the norms on the test. The "percentages of normal gain" shown in the table are based on the actual amount of school time elapsing between tests. The significance of the results obtained is clearly indicated by the high critical ratios, which indicate that the differences are real and are not due to chance. The standard deviations show great variabil-

ity in the groups tested. The fact that the range of variability increased in the final test would indicate that the superior, as well as the average and the inferior, pupils profited from the work.

TABLE 1

RESULTS IN GRADES V–VIII ON COMPREHENSION TESTS (1–5) OF IOWA SILENT READING TESTS GIVEN IN CITY, TOWN, AND CONSOLIDATED SCHOOLS OF THREE IOWA COUNTIES IN 1936–37

	Grade V (375 Pupils)	Grade VI (431 Pupils)	Grade VII (435 Pupils)	Grade VIII (411 Pupils)
Mean score:				
Pretest	49.89	70.46	92.82	117.73
Final test	82.39	110.59	120.66	137.40
Difference	32.50	40.13	27.84	19.67
Percentage of normal gain	180	191	146	109
Standard deviation:				
Pretest	22.22	27.52	30.22	31.60
Final test	31.41	34.20	33.14	33.45
Critical ratio $\left(\frac{\text{Diff.}}{\text{S.D.}_{\text{diff.}}}\right)$	16.41	19.02	12.95	8.90
Reading age (in years and months):				
Pretest	10–0	11–3	12–0	13–6
Final test	11–9	13–0	13–6	14–3
Difference	1–9	1–9	1–6	0–9
Reading grade:				
Pretest	4.9	5.9	6.7	7.9
Final test	6.3	7.6	7.9	8.9
Difference	1.4	1.7	1.2	1.0

EXPANDED PROGRAM IN 1937–38

The results obtained in this initial effort encouraged the State Department to make the program available on a state-wide basis in the year 1937–38. It was impossible to provide the same detailed services from the Extension Service at Iowa State Teachers College and the University of Iowa that had been previously provided. Because a large number of schools was involved and also because the program was made available to the rural schools, such detailed services were impractical. However, valuable assistance was given

by the Extension Division of Iowa State Teachers College through schools of instruction on the administration of the tests and the preparation of a statistical summary of the results. The college also provided assistance in demonstration work, although all counties could not be reached with this service.

TABLE 2

RESULTS IN GRADES IV–VIII ON COMPREHENSION TESTS (1–5) OF IOWA SILENT READING TESTS GIVEN IN RURAL SCHOOLS OF EIGHTEEN IOWA COUNTIES IN 1937–38

	Grade IV (1,304 Pupils)	Grade V (1,871 Pupils)	Grade VI (1,810 Pupils)	Grade VII (1,056 Pupils)	Grade VIII (1,071 Pupils)
Test norm:					
Pretest	34.0	57.0	78.0	102.0	124.0
Final test	48.0	69.0	93.0	115.0	136.0
Median score:					
Pretest	30.5	48.8	68.0	90.7	114.4
Final test	51.5	74.7	94.4	117.5	135.0
Gain	21.0	25.9	26.4	26.8	20.6
Percentage of normal gain	150	216	176	206	172
Percentage that final-test score is of test norm	107	108	102	102	99
Gain in reading age (in years and months)	1–7	1–4	1–3	1–5	0–11
Gain in reading grade	0.9	1.2	1.1	1.2	1.0

The rural schools in eighteen counties and the town, city, and consolidated schools in nineteen counties participated in this program. A total of 20,700 pupils was involved. The growth made in reading age during an elapsed time of six and one-half months is indicated in Tables 2 and 3.

In the rural schools a growth in reading age of one year and seven months is indicated for Grade IV; one year and four months for Grade V; one year and three months for Grade VI; one year and five months for Grade VII; and eleven months for Grade VIII. A normal gain in reading age for the period covered would be nine months for Grades IV and V and eight months for Grades VI, VII, and VIII.

The average attainment of the rural schools on the final test shows the averages, except in Grade VIII, to be slightly above the standards established for the test.

The scores on the pretest in the town schools, shown in Table 3, were much more nearly up to the standards than was the case in the rural schools. On the final test the town-school scores were farther above standard than were the scores of the rural schools.

TABLE 3

RESULTS IN GRADES IV–VIII ON COMPREHENSION TESTS (1–5) OF IOWA SILENT READING TESTS GIVEN IN TOWN, CITY, AND CONSOLIDATED SCHOOLS IN NINETEEN IOWA COUNTIES IN 1937–38

	Grade IV (2,489 Pupils)	Grade V (2,865 Pupils)	Grade VI (2,916 Pupils)	Grade VII (2,751 Pupils)	Grade VIII (2,575 Pupils)
Test norm:					
Pretest	34.0	57.0	78.0	102.0	124.0
Final test	48.0	69.0	93.0	115.0	136.0
Median score:					
Pretest	36.2	58.0	84.2	106.3	125.8
Final test	60.5	84.6	109.5	126.7	146.6
Gain	24.3	26.6	25.3	20.4	20.8
Percentage of normal gain	174	222	169	157	173
Percentage that final-test score is of test norm	126	123	118	110	108
Gain in reading age (in years and months)	1–5	1–3	1–3	0–11	1–0
Gain in reading grade	1.0	1.2	1.1	0.9	1.1

The difference in the medians between the two tests represents a gain ranging from 157 per cent to 222 per cent of the normal gain. A gain in reading age ranging from eleven months to one year and five months is shown, and a gain in reading grade ranging from nine months to one year and two months is indicated.

In the administration of this remedial program a circular was prepared by the State Department incorporating all the principles that were used in the program of the preceding year.[1] One copy of this

[1] H. K. Bennett, "A Remedial Program in Reading Involving the Development of the Basic Study Skills and Their Application to the Content Subjects." Circular No. 78. Des Moines, Iowa: State Department of Public Instruction, 1937.

circular was made available to every superintendent in the state. County superintendents in those counties conducting a county-wide program were permitted to duplicate the material in mimeographed form. Emphasis was again placed on the functional development of the basic study skills in connection with the study of the content subjects.

IMPORTANT BY-PRODUCTS

While the main objective of the work was to improve the teaching of reading in the schools, some other important developments also took place in connection with the in-service training of teachers. Changes were necessary in the organization in many schools in order that provision might be made for more supervised study. These changes resulted in decreasing the number of periods devoted to a given subject during the week, with a corresponding increase in the length of periods. Because of the longer periods, more time was used for directing study and less time was devoted to hearing lessons.

The emphasis on provision for individual differences resulted in efforts, in connection both with the academic and with the activities phases of the program, to incorporate materials that would take care of a wide variety of interests and abilities. In the academic work this object was accomplished by developing study exercises of varying degrees of difficulty and by providing supplementary reference materials representing wide ranges of reading ability and interests in the various content subjects. In the case of the latter the object was accomplished through the provision of activities of types that would appeal to many varied interests and abilities, some of which were intellectual, and some of which were more or less mechanical, in nature.

Forty-six superintendents, in a voluntary response to a questionnaire attached to the remedial circular, indicated that their teachers had responded enthusiastically to the program, that the majority had succeeded in developing time schedules to provide for an increased amount of directed study, and that their teachers had succeeded in individualizing their instruction in the content subjects as a result of the program.

PLANS FOR THIS YEAR

Plans for continuing the program during the current school year, in those counties which have already had the work, provide for

emphasizing the principles involved in last year's program in connection with the development of instructional units in the various subjects. The close relation between the mastery of the basic study abilities, as outlined in this program, and the development of suitable instructional units in the content subjects makes the two programs complementary to each other and, therefore, peculiarly well fitted for parallel development.

CONCLUSIONS

There are a number of conclusions to be drawn from the experiences in this program, some of the most important of which are: (1) A remedial program of this type is practical for the State Department of Public Instruction. (2) There is much to be gained from the enthusiasm resulting from a group enterprise on such a scale. (3) Superintendents report that their teachers have a better understanding of the reading program and its objectives. (4) Elaborate and involved corrective materials are not necessary to bring about improvement except for pupils who are subjects for clinical study. (5) The program has stimulated the purchase of additional reading material and the purchase of additional enrichment material for the content subjects. (6) There is a need for the provision of remedial material such as was used in this program, particularly in the smaller schools of the state. This need exists because the superintendents in these schools carry such heavy teaching loads, along with their administrative responsibilities, that little time is left for work of this kind. (7) Stimulation, such as a program of this kind provides, seems to be essential for the individual teacher if progress is to be made. The vast majority of teachers in the schools involved in this project were not previously incorporating in their daily teaching many of the practices which the remedial program called for. (8) A program such as that carried on here lays an excellent foundation for the development in the content subjects of instructional units providing for an enriched background and varied experiences. Following the principles outlined will make it possible to relate the entire procedure to the needs of individual pupils.

THE PRIMARY REPORT CARD

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MANY school systems are spending time and energy in revising report cards in order that the cards may prove of greater satisfaction to the home and to the school. Inasmuch as the report card in many cases is the only link between the home and the school, the major problems presented in reporting school progress to the home by means of a formal written report need careful consideration.

Existing practices in various school systems suggest differences in educational thinking in the matter of home reports. A recent letter from a former student informs the writer that his committee on report cards has decided to substitute a home visit for the report card in the first two grades. In Brockton, Massachusetts, we have completed a year's study and have adopted a new card for the first three grades in an attempt to report the pupil's school progress from the first day. Some schools attempt to measure a child's achievement in terms of his ability; others measure achievement in comparison to the achievement expected of the average child. Some schools utilize a five-point marking scale, others a four-point scale, and some a three-point scale. Some schools attempt to measure only academic progress; others stress personality growth. These are but a few of the issues to be faced in considering the problem of sending to the home a report of the child's growth in the school.

In a consideration of the advisability of doing away with formal written reports in the primary grades, recognition must be given to the added burden placed on the classroom teacher if she is to substitute a home visit for the written report. Furthermore, because of the nature of her job, she may not be sufficiently well trained in the social aspects of home visiting to secure a successful outcome. If a teacher is to be expected to make periodical home visits, she should have the personality and the training required for this job. The

present-day emphasis on the visiting teacher as a person trained for the specific work may be noted. Perhaps the desired outcomes could be better achieved if the parents were to make regular visits to the school. Too, unless the school has made a formal written report of a pupil's lack of progress, a parent is likely to be "surprised" when his child is retained in the same grade. Moreover, tradition has firmly established the report card as the link between most parents and the school. Without it, too many parents would find themselves cut off from the school.

Another argument which is often set forth for doing away with report cards centers in the subjectivity of teachers' marks. All students of education are familiar with the early experiments of certain investigators which revealed a lack of agreement on the part of teachers in judging merit of certain types of academic work. Since these early studies, many standardized tests have been made available, which may be used to supplement the teacher's subjective estimates of the child's scholastic growth. Besides these standardized instruments, any teacher may construct for her own use tests which are objective in nature. Today a teacher, using these objective measures to supplement her opinion, may interpret a child's growth on some arbitrary scale with a high degree of validity and reliability.

In Brockton the primary report card shows the child's growth in the following studies: reading, language, spelling, arithmetic, social studies, handwriting, music, and art.

The number of points on a constructed scale is of great importance because it may aid or limit the reliability of a teacher's marking. For the primary grades the most suitable scale is perhaps a three-point scale, inasmuch as it does not demand a fine classification of pupil achievement. In the Brockton schools we are experimenting with the following scale: S, superior; X, average; U, unsatisfactory. While the mark of U reports unsatisfactory growth, it does not necessarily report failure. When the U does mean failure, the teacher is obliged to write, in a space provided for this purpose, a comment giving the reasons why the child's progress is below the accepted standard. If a home report is to prove of any value, it should indicate to the home, as well as to the school, the lines along which remedial work should begin if maximum growth is to be attained.

This indication can be made only when the teacher gives specific reasons for a lack of progress. Moreover, the use of an arbitrary scale, such as that suggested, gives a certain amount of freedom from many of the undesirable concomitants of the usual A-B-C method of marking.

Attempts are being made in some school systems to measure a child's academic growth in relation to his ability as represented by his mental age or his intelligence quotient. Inasmuch as it is difficult to obtain, from his performance on a group test, a reliable measure of a child's ability, the use of a questionable ability score, when an individual intelligence test is not available, and of a questionable achievement score too often yields a doubly unreliable measure of a child's school progress. However, since some indications of a child's ability level are usually available, the school may attempt to give the home a rough idea of whether a pupil is working up to, or below, his ability.

Today many schools still attempt to report citizenship, conduct, or deportment. If these are to be reported, the reporting should be done in a negative way, for it is difficult to define a mark of A, B, or C in behavior. Satisfactory conduct should never be marked but should be accepted as the expected type of behavior. A child's conduct should be marked only when there is a departure from the standards of behavior accepted by the pupil's social group.

If the school is taking into consideration the whole child, then it would seem imperative to report progress in the growth of the whole child. The pupil's social achievements, his health habits, and his personality traits are perhaps of greater importance than mere scholastic progress. Most of the report cards issued recently appear too heavily burdened with long check lists covering the various items that go to make up personality. Many of these are so complex and detailed that the teacher cannot be expected to rate them with any degree of reliability, nor can the average parent be expected to understand the meanings of all the marks. There is need here for simplification which will make for greater reliability on the teacher's part and better understanding on the part of the home. In the primary grades, growth in personality may be reported in

terms of the pupil's work habits, regard for others, and care of health.

Whenever any mark is given indicating unsatisfactory growth in any of the traits that go to make up personality development, a statement should be made of the reason or reasons which may account for this lack of growth. If a report card is to prove of maximum value, the teacher should not only attempt to indicate a child's scholastic and personality growth but should be able to give reasons why expected growth has not taken place. For example, when a child's reading achievement is unsatisfactory because of excessive absence, immaturity, or lack of effort, a statement of the reason appearing on the card will suggest to the parent and the teacher a definite remedial approach.

While a number of experiments to abolish the report card have taken place in an effort to do away with certain evils inherent in a system of reporting school progress through the means of arbitrary symbols, many of these evils can be controlled and minimized to an extent that makes the card a profitable contact between the home and the school.

USE OF AGE-GRADE AND PROMOTION TABLES IN THE STUDY OF ENROLMENT TRENDS

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PURPOSE OF THIS STUDY

THIS article is the last in a series of articles relating to public-school enrolments. The first[1] dealt with general trends in national totals, the second[2] constituted a similar analysis by states, the third[3] presented data relating to white-negro differences, and the fourth[4] investigated urban-rural differences. The present article constitutes an attempt to demonstrate the value of age-grade and promotion data in the study of enrolment trends.

For illustrative purposes the writer decided to select only one of the few states that annually publish age-grade distributions of public-school enrolments. Virginia, which has published the longest continuous series presented in comprehensive form and convenient detail, was selected for inspection. The basic data are accessible in the annual reports of the state superintendent of public instruction. Only derived tables are published here,[5] and the study is limited to the school years from 1924–25 to 1936–37, inclusive.

[1] O. L. Harvey, "Enrolment Trends and Population Shifts," *Elementary School Journal*, XXXVIII (May, 1938), 655–62.

[2] O. L. Harvey, "Enrolment Trends in Elementary-School Grades, by States," *Elementary School Journal*, XXXIX (November, 1938), 200–210.

[3] O. L. Harvey, "Negro Representation in Public School Enrolments," *Journal of Negro Education*, VIII (January, 1939), 26–30.

[4] O. L. Harvey, "Urban and Rural Enrolment Trends," *Elementary School Journal*, XXXIX (March, 1939), 531–37.

[5] The Virginia school system operates on the seven-four plan, but some cities have adopted the eight-four plan. The published age-grade distribution is, therefore, somewhat misleading to the extent that high-school grades in schools on the seven-four plan are listed in the age-grade distribution as Grades 8, 9, 10, and 11, while corresponding grades in the eight-four systems are listed as Grades 9, 10, 11, and 12. The explanation of this procedure is both obvious and reasonable. The object was to maintain an

AGE-GRADE MEDIANS

Table 1 presents the median age of the children enrolled in each grade for each year during the period 1925–37. The dispersion of ages within the corresponding grades, as measured by half the difference between the upper and the lower quartile, is presented in Table 2.[1] Kindergarten enrollees are omitted throughout. It has

TABLE 1

MEDIAN AGES OF ALL ENROLLEES IN GRADES 1–12 AND IN ALL GRADES COMBINED IN VIRGINIA PUBLIC SCHOOLS, BY YEARS 1924–25 TO 1936–37

School Year	Age in Grade												
	All Grades	1	2	3	4	5	6	7	8	9	10	11	12
1924–25	11.96	8.16	9.63	10.83	12.03	13.11	14.08	15.03	15.65	16.40	17.15	18.05	18.25
1925–26	11.95	8.26	9.59	10.87	12.05	12.98	14.06	14.98	15.53	16.31	17.18	18.07	18.22
1926–27	11.95	8.21	9.50	10.77	12.15	13.05	13.99	14.93	15.50	16.40	17.21	18.04	18.40
1927–28	11.88	8.12	9.50	10.72	11.95	13.13	14.01	14.72	15.37	16.17	17.04	17.98	18.54
1928–29	11.77	8.16	9.37	10.60	11.85	12.91	13.79	14.57	15.30	16.14	16.98	17.94	18.26
1929–30	11.74	8.18	9.42	10.48	11.74	12.83	13.75	14.63	15.29	16.13	17.01	17.99	18.41
1930–31	11.67	8.11	9.37	10.48	11.59	12.68	13.63	14.44	15.27	16.07	16.98	17.97	18.31
1931–32	11.75	8.06	9.29	10.47	11.68	12.55	13.51	14.46	15.21	16.09	16.94	17.87	18.13
1932–33	11.85	8.05	9.28	10.39	11.55	12.58	13.45	14.41	15.25	16.07	16.96	17.88	18.39
1933–34	11.90	8.03	9.24	10.34	11.46	12.51	13.41	14.34	15.21	16.01	16.93	17.90	18.41
1934–35	11.96	7.98	9.23	10.30	11.42	12.46	13.42	14.32	15.11	15.99	16.96	17.85	18.09
1935–36	12.04	8.01	9.18	10.31	11.41	12.43	13.35	14.31	15.15	15.95	16.89	17.85	18.32
1936–37	12.06	7.95	9.15	10.25	11.38	12.38	13.26	14.22	15.09	15.94	16.85	17.73	18.38

unbroken series of grades in relation to an unbroken series of ages. To this extent the error is not serious, provided one think of the grade series, not as being divided into elementary- and high-school compartments, but rather as a consecution of steps of increasing altitude. The only serious disturbance resulting from this procedure is the marked drop in enrolments at Grade 12 and the concomitant effects on the age characteristics of the enrollees in that grade.

[1] Medians and quartiles were chosen in preference to means and standard deviations for two reasons: (1) Most of the distributions are skewed, some rather sharply. (2) In order that the subject matter might be made of greater interest to the practical administrator, it was deemed desirable to use the simpler statistical concepts. The relative constancy of the measures here reported and the large size of the enrolment totals themselves lead to the belief that this preference has not been altogether unjustified.

For purposes of computing the medians and the quartiles here reported, an even distribution of ages throughout each grade has been assumed. Thus the median age of all children reported as 13 years of age is assumed to be 13.50 years. The same kind of assumption has been made in computing the grade medians and the quartiles for all

been assumed that all enrollees below 7 years of age are 6 years of age and that the median of that age group is 6.50 years.

Examination of these tables yields the following major observations: (1) The medians and the quartile deviations for individual grades, as well as for all grades combined, have remained remarkably stable over a period of thirteen years. (2) There is, however, a noticeable, though not always consistent, tendency for both medians and

TABLE 2

QUARTILE DEVIATION OF AGE DISTRIBUTION OF ALL ENROLLEES IN GRADES 1–12 AND IN ALL GRADES COMBINED IN VIRGINIA PUBLIC SCHOOLS, BY YEARS, 1924–25 TO 1936–37

School Year	Deviation in Grade												
	All Grades	1	2	3	4	5	6	7	8	9	10	11	12
1924–25	2.53	1.11	1.32	1.42	1.46	1.38	1.30	1.30	1.13	1.01	0.98	0.96	0.80
1925–26	2.56	1.14	1.34	1.46	1.46	1.44	1.30	1.28	1.13	1.05	1.03	0.96	0.74
1926–27	2.62	1.07	1.32	1.44	1.58	1.43	1.31	1.24	1.11	1.12	1.04	0.96	0.80
1927–28	2.62	1.04	1.34	1.41	1.46	1.48	1.25	1.25	1.08	1.02	0.99	0.94	0.78
1928–29	2.61	1.06	1.30	1.44	1.46	1.44	1.30	1.20	1.10	1.05	0.98	0.97	0.80
1929–30	2.58	1.06	1.27	1.36	1.44	1.40	1.31	1.20	1.10	1.02	0.98	0.92	0.74
1930–31	2.58	1.06	1.27	1.36	1.41	1.40	1.28	1.18	1.12	1.06	1.00	0.96	0.77
1931–32	2.56	1.02	1.26	1.36	1.35	1.34	1.26	1.20	1.12	1.09	1.01	0.98	0.72
1932–33	2.58	1.01	1.22	1.34	1.36	1.33	1.28	1.20	1.12	0.96	1.02	0.98	0.77
1933–34	2.56	1.00	1.20	1.28	1.35	1.29	1.20	1.20	1.09	0.99	1.00	0.97	0.76
1934–35	2.58	1.02	1.21	1.29	1.35	1.30	1.22	1.10	1.07	1.04	1.00	1.00	0.98
1935–36	2.62	0.98	1.19	1.28	1.33	1.28	1.21	1.13	1.04	1.01	0.97	0.94	0.75
1936–37	2.62	0.96	1.14	1.24	1.32	1.25	1.16	1.10	1.04	0.98	0.94	0.94	0.80

quartile deviations to decline in the individual grades. This tendency is more marked in the elementary than in the secondary grades, and in the medians than in the quartile deviations.[1] (3) By contrast with the general downward trend in the medians and the quartile

ages combined; thus 2.50 becomes the theoretical median of all children reported as being in Grade 2. Whether or not these assumptions and procedures are technically justified does not affect the development of the argument based on the tables so prepared. The reader is at liberty to make such adjustments as he may desire, and the differences and the relationships here discussed will not be changed.

[1] Variations in Grades 11 and 12 are attributable, in part, to the low frequencies involved and, in part, to the existence of both seven-four and eight-four plans in the same state.

deviations in the individual grades, those for the total of all grades combined declined from 11.96 ± 2.53 in 1924–25 to 11.67 ± 2.58 in 1930–31 and then rose to 12.06 ± 2.62 in 1937. (4) Although the data are not published here, it should be noted that over the same period of time the median grade achievement by all enrollees combined rose consistently from 4.72 with a quartile deviation of 1.99 grades in 1924–25 to 5.32 with a quartile deviation of 2.37 in 1936–37.

The following statements are offered as a tentative explanation of the significance of these findings as revealed in the published age-grade distributions: (1) The school population of Virginia is slowly increasing in age and is somewhat farther advanced in school than it was fourteen years ago. It is not improbable that improved holding power, with special reference to the older children, and the further development of secondary-school facilities are the principal causes of this phenomenon. (2) At the same time, the median and the distribution of ages in the individual grades have dropped—a phenomenon which suggests improved grading and promotion practices. Presumably there is less retention and retardation of older children, and children in the same grade are more nearly of the same age.

Interesting evidence tending to support these conclusions is presented in Table 3, in which is recorded the difference between median ages from grade to successive grade in the same year.[1] Examination of the table yields the following observations: (1) The observed differences tend to remain remarkably stable. (2) There has been, however, a noticeable, though not always consistent, tendency for the differences in the elementary grades to diminish during the period from 1924–25 to 1936–37. This tendency is most marked in the difference between the legal age of admission to school and the median

[1] It is technically interesting to inquire whether the comparison of median ages from grade to successive grade in the same year is as satisfactory as the comparison from grade to successive grade in successive years, the supposed advantage of the latter being that theoretically it follows the same entering class throughout its school career. The writer prepared a table of the latter variety but found so little difference between it and Table 3 that he decided not to publish it. The principal difference, apart from some local variation, is that the "successive-year" series is, on the average, a few points (about .05) less than is the "same-year" series. A more comprehensive and detailed comparison is not possible because the "successive-year" series provides so few data. Thus, over the period 1925–37 only the entering classes of 1925 and 1926 have been graduated from high school.

age for Grade 1 and in the differences between medians in the first four grades. In the secondary grades there is a slight tendency for the observed differences to increase in size. (3) The differences prior to Grade 6, which are shown in Table 3, are greater than unity; after Grade 5 they are less than unity. The differences tend to decline as the higher grades are reached.[1] In general, all the observed differences between successive grade medians tend to approach unity.

TABLE 3

DIFFERENCE BETWEEN MEDIAN AGES FOR SUCCESSIVE GRADES IN THE SAME YEAR IN VIRGINIA PUBLIC SCHOOLS, BY YEARS 1924–25 TO 1936–37

School Year	Difference between Grades											
	6.5 Years to Grade 1	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12
1924–25	1.66	1.47	1.20	1.20	1.08	0.97	0.95	0.62	0.75	0.75	0.90	0.20
1925–26	1.76	1.33	1.28	1.18	.93	1.08	.92	.55	.78	.87	.89	.15
1926–27	1.71	1.29	1.27	1.38	.90	.94	.94	.57	.90	.81	.83	.36
1927–28	1.62	1.38	1.22	1.23	1.18	.88	.71	.65	.80	.87	.94	.56
1928–29	1.66	1.21	1.23	1.25	1.06	.88	.78	.73	.84	.84	.96	.32
1929–30	1.68	1.24	1.06	1.26	1.09	.92	.88	.66	.84	.88	.98	.42
1930–31	1.61	1.26	1.11	1.11	1.09	.95	.81	.83	.80	.91	.99	.34
1931–32	1.56	1.23	1.18	1.21	.87	.96	.95	.75	.88	.85	.93	.26
1932–33	1.55	1.23	1.11	1.16	1.03	.87	.96	.84	.82	.89	.92	.51
1933–34	1.53	1.21	1.10	1.12	1.05	.90	.93	.87	.80	.92	.97	.51
1934–35	1.48	1.25	1.07	1.12	1.04	.96	.90	.79	.88	.97	.89	.24
1935–36	1.51	1.17	1.13	1.10	1.02	.92	.96	.84	.80	.94	.96	.47
1936–37	1.45	1.20	1.10	1.13	1.00	0.88	0.96	0.87	0.85	0.91	0.88	0.65

The following statements are offered as a tentative explanation of the significance of these findings: (1) If all enrollees were advanced one grade each year and remained in the state school system, the differences between median ages for successive years would all be 1.00. If the observed difference is greater than unity, the evidence suggests congestion and inadequate promotion, especially of the younger children. If the difference is less than unity, it suggests that pupils, especially the older children, are dropping out of school in-

[1] The marked drop from Grade 11 to Grade 12 is attributable, in the main, to the existence of both seven-four and eight-four plans in the same state.

stead of continuing to higher grades. The greater the deviation from unity, the more serious the defect. (2) Presumably, then, there is congestion in the first four or five grades. In the upper grades, by contrast, the schools are failing to hold the older enrollees. (3) Nevertheless, a marked improvement in these respects is evident throughout the grades during the period 1924–25 to 1936–37. In other words, grading and promotion policies are improving, and holding power is increasing.

DATA FOR CLASS ENTERING SCHOOL IN 1926

To subject the problem of class progress to a more searching inquiry, the writer selected for intensive study the entering class of 1926, theoretically eligible for graduation from Grade 12 in 1937.[1] The relevant data are presented under state totals in Table 4.

If one is to appreciate the meaning of this table, one must understand the assumptions on which it is based. There were reported for 1926 a total of 113,938 enrollees in Grade 1.[2] Not all of these, however, were new admissions to school at the beginning of the school year. Just how many new admissions there were is not reported, and, for present purposes, it is not necessary to know. Promotions from Grade 1 that year totaled 67,052, which equals 58.8 per cent of the total enrolments in that grade. Without specific information concerning the proportion of new admissions promoted to Grade 2 during, or at the end of, the year, it is not unreasonable to assume that the proportion of new admissions promoted to Grade 2 was the same, or approximately the same, as that of the total enrolment for the grade, namely, 58.8 per cent. Thus, of every 1,000 new admissions to Grade 1 in 1926, 588 are presumed to have been promoted to Grade 2 at the end of the year, that is, after deducting the number who failed or dropped out during the year. This figure does not, however, take account of those who dropped out of school or migrated from the state after being promoted. It is here assumed that all who were promoted continued in a Virginia school.

[1] The basic data necessary for this analysis are provided in the annual reports of the state superintendent of public instruction for Virginia, underneath the age-grade tables, in a supplementary table indicating for each grade the number of enrollees dropped, failed, and promoted each year. Only derived data are published here.

[2] Actually reported were 110,866, but the total according to the breakdown by color and location was 113,938, the number used in this computation.

Now, total enrolments in Grade 2 consist of failures from Grade 2 in the preceding year, a few new admissions into the state school system at that level, and promotions from Grade 1 in the preceding year. The total reported for 1927 is 71,120, of whom 73.0 per cent were promoted to Grade 3. On the same assumption as that described above, it follows that 73.0 per cent of the 588 hypothetical promotions from Grade 1, namely, 429, were promoted from Grade 2 to Grade 3.

TABLE 4

SCHOOL-SURVIVAL RATE AT END OF EACH SUCCESSIVE YEAR OF 1,000 HYPOTHETICAL NEW ENTRANTS TO GRADE 1 IN 1926 WHO COMPLETE A GRADE EACH YEAR IN VIRGINIA PUBLIC SCHOOLS

Year Ending	Assumed Grade	State Total	City Schools		County Schools	
			White	Colored	White	Colored
1926	New admissions	1,000	1,000	1,000	1,000	1,000
1926	1	588	741	649	572	556
1927	2	429	610	465	423	372
1928	3	317	517	335	311	254
1929	4	223	428	236	219	157
1930	5	161	351	162	157	103
1931	6	116	283	116	110	70
1932	7	86	226	83	79	52
1933	8	59	172	53	52	35
1934	9	43	130	33	38	25
1935	10	33	100	23	30	19
1936	11	28	80	17	27	17
1937	12	24	69	15	23	16

Application of this line of reasoning to all successive grades results in a series of estimated survivals per 1,000 of initial new admissions to Grade 1 in 1926 throughout the successive grades in each successive year. The results are startling and may be expressed as follows:

At the beginning of the 1926 school year, a hypothetical total of 1,000 children who had not yet attended school were admitted to Grade 1. Only 588 of them were promoted to Grade 2 at the end of the year. More than two-thirds of them had dropped out of the Virginia public-school system or had failed to pass a grade each year before they had reached Grade 4. By the time they reached the secondary school (assuming all schools to be on the seven-four plan),

only 86 were left who had completed one grade in each successive year; and at the end of 11 years of schooling only 28 were left who had neither failed nor dropped out of the Virginia state school system.

DIFFERENCES IN URBAN AND RURAL SCHOOLS

All the preceding evidence relates to state totals and does not reflect the more significant detail that appears when the state data

TABLE 5

MEDIAN AGE OF ALL ENROLLEES IN EACH GRADE AND IN ALL GRADES COMBINED IN VIRGINIA PUBLIC SCHOOLS, BY LOCATION OF SCHOOL AND RACE OF ENROLLEES, 1936–37

Grade	State Total	City Schools		County Schools	
		White	Colored	White	Colored
1	7.95	7.17	7.66	7.91	8.48
2	9.15	8.19	9.08	9.06	10.35
3	10.25	9.23	10.26	10.16	11.45
4	11.38	10.31	11.47	11.30	12.61
5	12.38	11.34	12.40	12.35	13.49
6	13.26	12.32	13.31	13.16	14.36
7	14.22	13.36	14.24	14.27	15.18
8	15.09	14.39	15.17	15.22	16.06
9	15.94	15.44	16.15	16.02	16.86
10	16.85	16.50	17.03	16.91	17.81
11	17.73	17.48	17.78	17.79	18.90
12	18.38	18.36	18.39	18.40	18.50
All grades	12.06	12.47	12.20	11.99	11.89
Percentage of all enrolments	100.0	17.6	7.5	55.4	19.5
Median grade achieved	5.32	6.85	5.50	5.34	4.12

are broken down into their component parts, urban and rural, white and colored. It is unnecessary here, would occupy too much space, and would add little to the point of this article to present all the evidence in this connection. It should suffice to present in greater detail the material relating to the entering class of 1926 and to summarize the evidence relating to the 1937 age-grade distribution.

The detailed breakdown of the entering class of 1926 is presented in Table 4.[1] The same assumptions and the same procedures apply

[1] Available statistics actually differentiate the city from the county schools. In the absence of more accurate information, these categories are assumed, for the purposes of this article, to approximate an urban-rural distinction.

here as before. It is clearly evident, first, that the school-survival rate of children in city schools is greater than that of those in county (predominantly rural) schools[1] and, second, that the school-survival rate of the white children is greater than that of the colored.

A breakdown of the age-grade distribution for 1937 alone is presented in Tables 5 and 6, which tend to confirm the findings revealed in Table 4, by demonstrating that the marked congestion in the earlier grades in the state totals is attributable, in the main, to con-

TABLE 6

DIFFERENCES BETWEEN MEDIAN AGES FOR SUCCESSIVE GRADES IN THE SAME YEAR, IN VIRGINIA PUBLIC SCHOOLS, BY LOCATION OF SCHOOL AND RACE OF ENROLLEES, 1936–37

Grade Interval	State Total	City Schools		County Schools	
		White	Colored	White	Colored
6.5 years to Grade 1	1.45	0.67	1.16	1.41	1.98
Grades 1– 2	1.20	1.02	1.42	1.15	1.87
Grades 2– 3	1.10	1.04	1.18	1.10	1.10
Grades 3– 4	1.13	1.08	1.21	1.14	1.16
Grades 4– 5	1.00	1.03	.93	1.05	.88
Grades 5– 6	.88	.98	.91	.81	.87
Grades 6– 7	.96	1.04	.93	1.11	.82
Grades 7– 8	.87	1.03	.93	.95	.88
Grades 8– 9	.85	1.05	.98	.80	.80
Grades 9–10	.91	1.06	.88	.89	.95
Grades 10–11	.88	.98	.75	.88	1.09
Grades 11–12	0.65	0.88	0.61	0.61	−0.40

ditions obtaining especially among enrollees in the county or rural schools and, to a relatively minor extent, to conditions among the colored enrollees.

USE OF AGE-GRADE TABLES

This brief analysis of age-grade and promotion data for one state alone serves to illustrate the usefulness of such material in revealing defects in grading and promotion policies; in indicating, in a general way, the location of the problem; and in providing a relatively detailed analysis of enrolment trends.

[1] It is probable that many children progress from county elementary schools to city high schools, but it is not possible to determine the effects of this movement on the school-survival rates here reported.

MEASURING INTELLIGENCE AND READING CAPACITY OF SPANISH-SPEAKING CHILDREN

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*

ALL SCHOOLS with bilingual children have special problems. Tompkins School, Oakland, California, where 68 per cent of the enrolment is comprised of Spanish-speaking pupils, is no exception. Tompkins School is an elementary school with a kindergarten and the first seven grades. It has an enrolment of approximately six hundred pupils. As a means of solving some of the problems faced by the administrator and faculty of Tompkins School, a special testing program was undertaken, the purposes of which were: (1) to determine the validity of intelligence tests administered in English to Spanish-speaking children and (2) to find the grade in which English becomes the dominant language for these children.

PROCEDURE

The first information needed was an accurate list of the Spanish-speaking children. Each teacher filled out a standardized form designating the birthplace of the fathers and the mothers of his pupils and indicating the language spoken at home. In those homes where two languages were spoken, the number "1" was used to indicate the predominant language (in the pupil's opinion) and "2" the other language. In the case of some of the pupils who were not certain about the language spoken or who were reluctant to give the desired information, Mrs. Carolina Canelo Ellis, a teacher of Spanish descent, who speaks, reads, and writes Spanish, either checked with the pupils personally or made home calls to secure the desired information.

A comprehensive study was made of available tests. Only non-language tests, or those which could be administered orally, were considered for use since the pupils could neither read nor write

Spanish. The Otis Group Intelligence Scale, Primary Examination, Form A, was selected for the intelligence test because the same form could be used for high-first, second, third, and atypical[1] grades and because a Spanish translation of the directions for administering it was available.[2] No group intelligence test was found that could be administered satisfactorily to pupils in the kindergarten and the low-first grade. The second test selected, a nonlanguage test which could be used for the fourth to the seventh grades, was the Reading Capacity Test, Intermediate Test, Form A, by Donald D. Durrell and Helen Blair Sullivan.[3]

After the list of the children who at home spoke Spanish and of those who spoke both Spanish and English had been completed, the pupils were grouped according to teacher and grade. Three hundred and ninety-nine Spanish-speaking or bilingual children were found, but only 313 were considered eligible for testing.[4] Of the 86 eliminated, 78 were in the kindergarten or low-first grade, and eight were either extremely bashful or their chronological ages were not known. For testing purposes the 313 eligible pupils were placed at random in groups of approximately the same number of pupils. A testing schedule was made so that all the pupils in one group were tested first in Spanish and, two weeks later, in English. The pupils in the other group were tested first in English and later in Spanish.[5] By this method whatever retention there was from one test to the other was eliminated as a factor influencing the results of this study.

[1] Atypical grades are special classes in the Oakland public schools for pupils with intelligence quotients of 70 or less.

[2] Published by the World Book Co., Yonkers-on-Hudson, New York. The research department of the Oakland public schools had a copy of the translation used by A. J. Mitchell for his study, "The Effect of Bilingualism in the Measurement of Intelligence," *Elementary School Journal*, XXXVIII (September, 1937), 29–37.

[3] Published by the World Book Co., Yonkers-on-Hudson, New York, 1937. The directions for administering this test were translated by Gabriel G. Bejarano, a Spaniard, and were checked by Mrs. Ellis.

[4] The nationalities of the 399 pupils, according to the birthplaces of their parents, were: Mexican, 65 per cent; Puerto Rican, 15 per cent; Hawaiian, 6 per cent; Spanish, 4 per cent; and American, 10 per cent.

[5] All the Spanish tests were administered by Mrs. Ellis; all the English tests, by the writer.

Because of an epidemic of mumps, all the 313 pupils were not tested. Of the total of 210 pupils who were tested in both languages, 104 were tested on the Otis Group Intelligence Scale, 106 on the Durrell-Sullivan Reading Capacity Test. Only the scores of the pupils tested in both languages were used in the computations.

FINDINGS

Results on intelligence test.—Table 1 gives the numbers and the percentages of pupils in the first four grades tested who scored

TABLE 1

RESULTS ON OTIS GROUP INTELLIGENCE SCALE ADMINISTERED IN SPANISH AND IN ENGLISH TO SPANISH-SPEAKING PUPILS IN PRIMARY GRADES

Grade	Total Number of Pupils	Pupils Scoring Higher on Spanish Test			Pupils Scoring Higher on English Test			Pupils Making Same Score on Both Tests	
		Number	Per Cent	Range in Superiority of Scores	Number	Per Cent	Range in Superiority of Scores	Number	Per Cent
High-first	20	17	85	2–26	1	5	0– 6	2	10
Second	27	17	63	3–21	10	37	3–11	.....	.....
Third	30	20	67	1–33	7	23	2–13	3	10
Atypical	27	16	59	1–18	10	37	1–10	1	4
Total	104	70	67	1–33	28	27	1–13	6	6

higher in Spanish and in English and the numbers making the same scores on the Otis test. Sixty-seven per cent of the pupils scored higher in Spanish; 27 per cent, higher in English; and 6 per cent had the same scores in both languages. The range of superiority for Spanish was from one to thirty-three points and for English only one to thirteen. In every case where the English score was higher than, or the same as, the Spanish score, the pupils had been tested first in Spanish and second in English. This result indicates a certain amount of retention.

Table 2 shows the range, the mean, the standard deviation, and

the reliability of the difference between the English and the Spanish mean intelligence quotients in each of the four grades. The mean intelligence quotient of the Spanish test was higher in every grade. The greatest difference, 10.5, was found in high-first grade and the least, 5.0, in the second grade. When all the scores of the four grades together were computed, the difference of the means was found to be 7.6 points in favor of Spanish. The difference of the true means was 3.55 times the standard error of the mean, in favor of Spanish—a ratio indicating statistical significance.

TABLE 2

INTELLIGENCE QUOTIENTS OBTAINED ON OTIS GROUP INTELLIGENCE SCALE ADMINISTERED IN SPANISH AND IN ENGLISH TO SPANISH-SPEAKING PUPILS IN PRIMARY GRADES

Grade	Range in Intelligence Quotients		Mean Intelligence Quotient		Standard Deviation		Difference between Means in Favor of Spanish	Diff. / S.D.diff.
	Spanish Test	English Test	Spanish Test	English Test	Spanish Test	English Test		
High-first	91–130	80–121	110.5	100.0	11.0	11.7	10.5	2.92
Second	92–129	80–128	107.7	102.7	8.0	10.0	5.0	2.03
Third	91–128	71–119	109.3	99.2	9.9	14.1	10.1	3.23
Atypical	59–100	56– 97	82.5	77.3	10.1	10.0	5.2	1.90
All grades	59–130	56–128	102.2	94.6	15.2	15.6	7.6	3.55

A further analysis of Table 2 shows that the range of the Spanish test started and ended higher in every grade. For example, in the high-first grade the range for the Spanish test was 91–130, whereas it was 80–121 for the same group of pupils on the English test. The Spanish started eleven points higher and ended nine points higher. This tendency is the same for the other grades.

Since there is a significant difference between the true means of the two tests, the conclusion is that the results of intelligence tests administered in English to Spanish-speaking children in the primary grades are not valid and should not be used for comparing Spanish-speaking and English-speaking children. The former are rated, on the average, approximately 7.6 points lower than their true in-

telligence quotient when measured in the language that they understand better.

Results on test of reading capacity.—The Durrell-Sullivan Reading Capacity Test is divided into two parts: word meaning and para-

TABLE 3

RESULTS ON DURRELL-SULLIVAN READING CAPACITY TEST ADMINISTERED IN SPANISH AND IN ENGLISH TO SPANISH-SPEAKING PUPILS IN FOURTH TO SEVENTH GRADES

Test and Grade	Total Number of Pupils	Pupils Scoring Higher on Spanish Test			Pupils Scoring Higher on English Test			Pupils Making Same Score on Both Tests	
		Number	Per Cent	Range in Superiority of Scores	Number	Per Cent	Range in Superiority of Scores	Number	Per Cent
Word meaning:									
Fourth	28	28	100	5–43	.....	.....	.....	.....	.....
Fifth	29	29	100	6–35	.....	.....	.....	.....	.....
Sixth	23	22	96	5–33	1	4	0– 1	.....	.....
Seventh	26	22	85	4–24	4	15	1– 7	.....	.....
All grades	106	101	95	4–43	5	5	0– 7	.....	.....
Paragraph meaning:									
Fourth	28	18	64	1–16	8	29	1–10	2	7
Fifth	29	14	48	1–20	15	52	1–22	.....	.....
Sixth	23	6	26	6–16	16	70	2–16	1	4
Seventh	26	8	31	3–19	17	65	1–25	1	4
All grades	106	46	43	1–20	56	53	1–25	4	4
Total score:									
Fourth	28	28	100	1–50	.....	.....	.....	.....	.....
Fifth	29	27	93	1–55	1	3	0– 2	1	4
Sixth	23	20	87	1–45	3	13	3– 8	.....	.....
Seventh	26	13	50	3–39	13	50	1–29	.....	.....
All grades	106	88	83	1–55	17	16	1–29	1	1

graph meaning. The results of the two were so different that it was considered advisable to record them separately as well as collectively.

Table 3 shows the numbers and the percentages of pupils who

scored higher in Spanish and in English on both the word-meaning and the paragraph-meaning tests and on the total score. This table reveals that only about 5 per cent of the 106 pupils made higher scores in English than in Spanish on the word-meaning test, whereas 95 per cent scored higher in Spanish. In the case of the paragraph-meaning test, 53 per cent of the pupils scored higher in English, and 43 per cent scored higher in Spanish, while 4 per cent scored the same in both tests. These results indicate that the comprehension of the English paragraph was greater than the comprehension of the Spanish paragraph.

The results of the total score showed a decided advantage in favor of Spanish. Eighty-three per cent of the pupils scored higher in Spanish; 16 per cent, higher in English; and 1 per cent had the same scores in the two languages. Since 50 per cent of the seventh-grade pupils scored higher in Spanish and 50 per cent higher in English, the conclusion is that the knowledge of both languages was about equal in that grade.

Table 4 compares further the results of the English and Spanish administration of the Reading Capacity Test. This table reveals that the mean of the word-meaning test was higher in Spanish for all four grades. The greatest difference was found in the fourth grade and the least in the seventh. The mean difference for the seventh grade was only 10.6 words compared with 26.0 words in the fourth grade. Nevertheless, the difference was significant. The difference of the true means was significant in all four grades, but the critical ratio decreased as the grade increased. These data indicate that, in spite of the four, five, six, and seven years that these Spanish-speaking children had attended schools where all teaching was done in English, their English vocabularies were not equal to their Spanish vocabularies.

Table 4 also shows the mean differences in the paragraph-meaning test. In the fourth grade there was a difference of 2.2 points in favor of the Spanish test, whereas in the seventh grade the difference was 5.2 points in favor of English. From the fifth grade on, the English mean was higher than the Spanish mean. In no grade was there a significant difference between the true means, although in the seventh grade the chances were 99 in 100 that the true mean

would be greater in English. These results were diametrically opposed to those on the word-meaning test.

When the results of the word-meaning and the paragraph-meaning tests were combined, it was found that the mean for the Spanish

TABLE 4

SCORES OBTAINED ON DURRELL-SULLIVAN READING CAPACITY TESTS ADMINISTERED IN SPANISH AND IN ENGLISH TO SPANISH-SPEAKING PUPILS IN FOURTH TO SEVENTH GRADES*

Grade	Range in Scores		Mean Score		Standard Deviation		Difference between Means in Favor of Spanish	Diff. / S.D. diff.
	Spanish Test	English Test	Spanish Test	English Test	Spanish Test	English Test		
Word meaning:								
Fourth	19– 61	7– 35	47.1	21.1	10.0	7.8	26.0	10.88
Fifth	29– 58	13– 40	49.9	30.4	6.9	7.3	19.5	10.43
Sixth	33– 62	16– 50	49.9	32.7	7.6	9.4	17.2	6.83
Seventh	31– 63	25– 63	52.9	42.3	8.1	10.0	10.6	4.21
Paragraph meaning:								
Fourth	5– 28	3– 23	17.7	15.5	6.1	5.4	2.2	1.43
Fifth	16– 49	8– 47	32.8	34.9	7.9	8.6	– 2.1	0.97
Sixth	15– 44	23– 46	31.9	34.9	8.9	6.6	– 3.0	1.30
Seventh	23– 50	19– 54	36.0	41.2	8.3	7.9	– 5.2	2.31
Total score:								
Fourth	30– 88	11– 52	64.3	35.9	13.9	11.7	28.4	8.26
Fifth	50–103	21– 84	82.2	64.2	12.1	13.5	18.0	5.34
Sixth	58–100	44– 91	81.8	67.9	13.0	13.7	13.9	3.53
Seventh	63–113	60–117	88.5	85.2	11.9	14.9	3.3	0.88

* All the mean scores given are raw scores. To get the grade and age equivalents of these scores, consult the "Directions for Administering and Scoring the Durrell-Sullivan Reading Capacity and Achievement Tests."

was higher in all four grades. The difference was greatest in the fourth grade and diminished progressively as the grade increased. There was a significant difference between the true means in the fourth, fifth, and sixth grades, and in the seventh grade the chances were 81 in 100 in favor of Spanish.

It has been seen that there was a decided difference in the results between the tests of word meaning and paragraph meaning in the Durrell-Sullivan Reading Capacity Test. The Spanish vocabu-

lary was larger in each of the four grades by a significant difference, whereas comprehension of the English paragraph was greater than that of the Spanish in fifth grade and beyond. The reasons for this difference are not positively known, but certain factors that help explain this situation will be discussed briefly.

In the first place, practically none of the pupils tested had ever had Spanish read to them, whereas they had heard English read since they entered school. This fact had undoubtedly familiarized them with ideas read in English. Even though their vocabularies were smaller in English, they were apparently better able to grasp a trend of thought in their adopted language than in their native tongue.

Second, the Spanish understood by many of the pupils seemed to consist of words and phrases. As far as the author was able to determine, little effort was made by the parents of these pupils to teach them to speak in complete sentences and paragraphs. As a result they had fairly large word vocabularies, but their understanding of complete thoughts was not correspondingly large. On the other hand, their English vocabularies were limited, probably because many of the words and phrases that American children learn at home had not been taught to the Spanish-speaking pupils in school. Their comprehension of ideas in English had been aided by their teachers since they first entered school. Furthermore, their attendance at movies had undoubtedly aided their understanding of ideas presented in complete sentences and paragraphs.

Third, the Spanish translation of the paragraphs might have been more difficult than the English, although every effort was made to see that the two were equal in difficulty. After the directions had been translated, they were checked carefully by another person and were again checked by the translator before they were used.

Fourth, the topics covered in the paragraphs may have involved areas of experience which were unfamiliar to the children in Spanish but were familiar to them in English.

SUMMARY AND CONCLUSIONS

In the primary and atypical grades the average pupil scored 7.6 points higher in the Spanish intelligence test. The comprehension

of the Spanish vocabulary was significantly greater in the fourth to the seventh grades. From the fifth grade on, English was found to be the dominant language as far as an understanding of paragraphs was concerned. The total score in reading capacity favored Spanish in the fourth to the seventh grades, but in the seventh grade the difference was least prominent.

These findings point to the following conclusions and recommendations: (1) Intelligence tests administered in English to Spanish-speaking children are not valid in the first three grades and in atypical classes and should not be used as a means of comparison between English-speaking and Spanish-speaking children. (2) There should be no rigid classification based on intelligence quotient, at least in the primary grades. (3) Oral language should be used extensively in purposeful activities with the objective of increasing the English vocabulary. (4) Native traits and culture should be assimilated with American culture, whenever possible, as a means of enriching the vocabulary. (5) Instruction in formal reading should be postponed until such time as the pupil has an adequate understanding of the English language. This requirement may necessitate postponement from one to three years, depending on the progress in the comprehension of English. (6) Schools with large proportions of bilingual pupils should have special testing programs and should not be subjected to regular city-survey tests. (7) Only teachers who have sound understanding of a particular bilingual group and who do not look on the children as inferior should be employed in schools with predominantly bilingual children.

THE ELEMENTARY SCHOOL IN ARGENTINA

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*

A HUNDRED years have passed since Horace Mann electrified the educational world with his sweeping reforms in the Massachusetts school system. Today to the educator in this country he stands a legendary figure, historically significant but exerting little influence on an expanded educational system tremendously more complex than that of his day. In Argentina his influence still reaches into the humblest rural school.

Domingo Faustino Sarmiento (1) visited the United States, was greatly impressed with the most progressive elements of New England education, and became a disciple of Horace Mann. More important to the school system of Argentina, he became minister of public instruction and president of the Republic. From his teaching are traced practically all the great trends in Argentine elementary education (7).

The fifth article of the national constitution states that each province must incorporate in its constitution provision for a system of primary education. This provision was widely adopted, and for seventy years the story of the North American one-room school, with all its attendant defects and failures, was re-enacted. Free, obligatory, common education under the direction of a general council of education and a director-general appointed by the national president was established in each of the fourteen provinces. The existence of vast areas of sparsely settled, semifrontier territory, poor communication, and difficulty of transportation contribute to the rather low quality that these provincially controlled elementary schools display even today.

National unity in the elementary system was established in Buenos Aires and the ten federal territories by the basic law (No. 1420) of July 8, 1884 (11: 505). When, on October 19, 1905, the Ley

Láinez (No. 4874) was passed, permitting the federal government to establish elementary schools in the fourteen provinces upon request of the provinces (11: 524), the system became essentially national. The provincial schools for a time were being slowly eliminated by the competition with the higher standards of instruction, equipment, and finances of the federally subsidized elementary schools (2), but in the past ten years there has been an increase of about 200,000 in the enrolment of the provincially controlled schools compared with an increase of 125,000 in the federal schools in districts where the two compete (8: Table 12).

As established by the basic law already referred to, the national system of elementary education derives its power from the president of the Republic and is administered as a "line and staff" system, as shown in Figure 1.

Rolling schools are similar in function to the early moving schools of American Colonial times. There are two types of private schools: one, the strictly autonomous; the other, "incorporated" with, and subject to, supervision by a national school. Both are often of the boarding type—the only means for children living in the remoter parts of the country to obtain schooling.

Every child from six to fourteen years of age is compelled by law to attend an approved elementary school, and the entire elementary system is free. Without the explicit consent of the National Board of Education, the six-year elementary program can be neither lengthened nor shortened. Pupils pass from any of the elementary schools into the intermediate school, which is six or seven years in length and is divided into upper and lower cycles, the lower being a four-year prescribed cultural course (5). The law provides that the elementary-school child may be instructed in the home (a necessary provision in certain of the isolated sections), but an accounting to the National Board of Education is required. It is interesting to note that in a law passed in 1884 all corporal punishment was forbidden in the schools.

Reminiscent of the Massachusetts law of 1647, with which, through Sarmiento, the Argentine government was familiar, provision was made for schools in urban districts having one thousand or more inhabitants and in rural areas containing three hundred. To

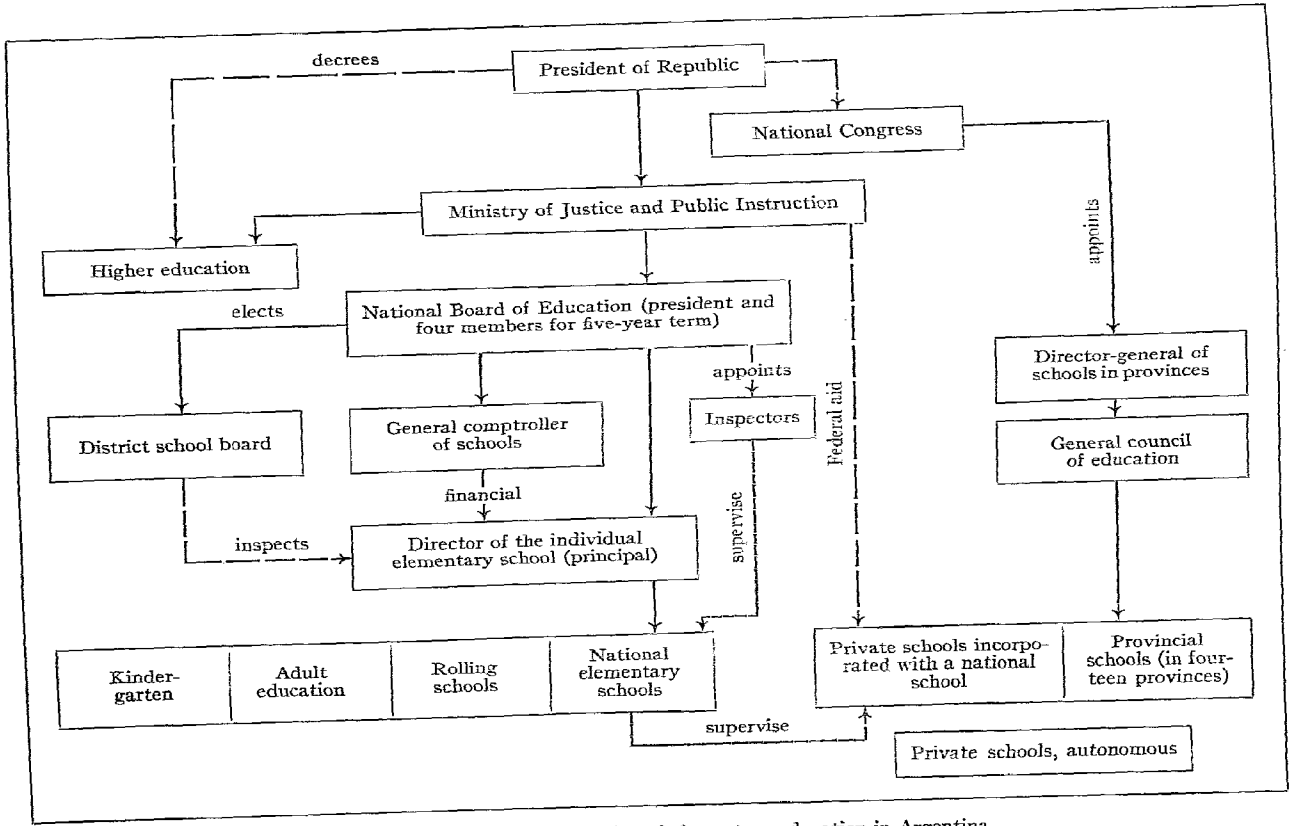

FIG. 1.—Scheme of administration of elementary education in Argentina

supervise each of these districts, five "heads of families" are appointed as a committee (district school board) by the National Board, but a more direct supervision is maintained through semi-annual inspection by professional supervisors.

An essential supervisory function is reserved to the central government through its control of the curriculum. The basic law of 1884 establishes the "direction of moral, intellectual, and physical development" as the official objective of the school system and lists the following subjects as the minimum essentials: reading; writing; arithmetic; Argentine geography; elements of universal geography; Argentine history; elements of general history; Spanish (the native speech); morality and manners; elements of hygiene; elements of mathematical, physical (pertaining to biology), and natural science; elements of art and vocal music; gymnastics; and knowledge of the national constitution (civics). To these are added, for girls, housekeeping and domestic science and, for boys, basic military drill and, if in the country, elements of agriculture and animal husbandry. These were established by the basic national law in 1884—in a nation released from the Spanish yoke and from a long period of anarchy and dictatorship only about thirty-five years before, a country sparsely settled, far from immediate contact with European thought, and economically poor. It was a masterful vision, which, despite great practical difficulties of execution, has led to a strong, progressive, centrally controlled system.

Many of the materials of teaching and all the core curriculums are yearly established by the National Board of Education. Certain areas of pupil activity are established: (1) social activities: work in groups, clubs, debates, exhibitions, collecting for class museums, plays, study of great historical figures, work on class newspapers; (2) hygienic activities: games, physical exercise, rest, personal hygiene; (3) aesthetic activities: art work, songs, declamations, drama, stories; (4) manual activities: building construction, outline drawing, work in wood, modeling, fiber-plaiting, and work in the kitchen. Each of the subjects used in developing these activities is analyzed, the methods for teaching are given in detail, and a time schedule of classes is decreed (10). It is noteworthy that despite numerous references to moral training no indoctrination of religious beliefs is per-

mitted, since by the basic law provision is made for religious training only before and after the school day and then only to those children of corresponding religious denomination.

Perhaps the greatest supervisory control that the National Board exerts is the indirect one of licensing teachers. In order to be appointed to any administrative position in the school system, a candidate must have justified his capacity technically by certification, morally by testimonials as to conduct, and physically by examination. A teacher must hold a diploma issued by one of the national normal schools or by one of the provincial schools (a certificate issued by the latter is valid only in the province issuing it). As a means of promoting professional growth, the elementary-school teachers are classified into three groups representing five years of experience, ten years of experience, and experience of more than ten years. The salary depends on the classification, and, to be eligible to each successive group, the teacher must attend in-service training courses. After ten years of service the teacher may retire at half-pay for injury or incapacity, and after twenty years he may retire at pleasure.

Financially, all public elementary schools, except those of the provinces, are dependent on the national budget. Annually the total national budget must be approved by the national legislature, and one of the eight parts included in this budget is apportioned in its entirety to the Ministry of Justice and Public Instruction. The minister must divide the appropriation into three sections for the university, the secondary schools, and the elementary schools. The latter portion is given to the National Board of Education for actual administration and is divided among the local schools on the basis of the number of classes. In the most recent figures available the federal budget totals approximately eight hundred and twenty million pesos, and clementary education constitutes nearly a seventh of the total federal expense. A few of the outstanding items in the 1937 budget, adopted essentially intact from the projected budget (3), will serve to indicate the relative importance of education (see p. 774).

When an analysis is made of the pupil population, the major defect of the Argentine system immediately becomes apparent. The

figures for 1936 show that 1,753,133 children were enrolled in the elementary schools but that only 1,543,317 were in actual attendance (200,000 fewer than were enrolled). Of these, 41.51 per cent were in the first grade, 19.94 per cent in the second grade, 14.07 per cent in the third grade, 9.82 per cent in the fourth grade, 6.04 per cent in the fifth grade, and 4.62 per cent in the sixth grade. These percentages indicate that great numbers of pupils leave the school before completion of the legal minimum. While it is impossible to tell exactly the number of pupils not attending school, the present minister, Jorge E. Coll, has calculated, using Sarmiento's previous

PARTIAL BUDGET FOR 1937 FOR ARGENTINA (AMOUNTS ROUNDED TO NEAREST THOUSAND)

	Pesos
Secondary schools and universities	89,281,000
Elementary education (federal)	115,787,000
Army	86,809,000
Navy	57,527,000
Public works	29,002,000
Pensions, retirements (including school teachers)	46,559,000
Relief	33,124,000
Interior	119,201,000
Public debt	194,750,000

discovery that 20 per cent of the total population are of school age, that there should be 2,552,212 pupils of school age in the Republic. Hence slightly more than a million, or nearly 40 per cent of the school population, are illegally avoiding instruction (4).

About a third of the population of the Republic is concentrated in seven large cities, the largest being Buenos Aires, and in the federal district, which in itself contains over a fifth of the nation's entire population. It would seem that in so highly concentrated a population one would find the ultimate case in favor of a central federal control of the schools. The explanation for the failure to account for the missing section of the enrolled school population is difficult to find, but an explanation of the rapid elimination in the higher grades of the elementary school is readily seen. There are two Argentinas: one, that of the cities (Buenos Aires, Rosario, Córdoba, La Plata,

Santa Fé, Tucumán, Mendoza); the other, that of the vast pampas, the mountains, and northern jungles, where, with the exception of a few baronial landowners (many of whom are educated abroad), almost all the people live in primitive, frontier-like conditions, some in actual misery and want (4). Schools are not available. There are seasonal population shifts. The children are needed to work on the *estancias* and farms. Communication is too poor to permit of any but occasional supervision by the central government.

These conditions, however, account for only a portion of the enrolment loss. Minister of Public Instruction Coll feels that the drastic diminution of pupil attendance in the higher grades must be explained on the basis of a poorly designed curriculum. In his opinion, the curriculum, designed for preparation for higher education, covers fields so purely intellectual that many of the pupils are unable to master the work, which has no practical value to persons in their positions in life (4). Minister Coll's solution would be a revised curriculum and increased centralization. It is doubtful that increased centralization, with attendant rigid requirements, inflexibly applied in a country of wide social, economic, and geographical contrasts, will provide a workable solution.

Selected Bibliography

1. Abel, J. F. "Bibliography of Sarmiento's Works and Books Written about Him" (typewritten). Washington: United States Office of Education, August 3, 1934.
2. Aden, Fred. "Education in Argentina," *Bulletin of the Pan American Union*, LXII (July, 1928), 706–15.
3. Congreso Nacional. *Diario de sesiones de la cámara de diputados de la nación:* Tomo IV, Sesiones extraordinarias, Octubre 14 de 1936, 26ª reunión, 1ª sesión extraordinaria, p. 7. Buenos Aires: Imprenta del Congreso Nacional, 1936.
4. "En el decreto relativo al plan general de la enseñanza," *La Prensa* (Buenos Aires), LXIX (3 de junio de 1938), 10.
5. Hall, Robert King. "The Projected Reform in the Secondary-School Curriculum in Argentina," *School Review*, XLIV (December, 1936), 769–80.
6. Luckey, George W. A. *Outline of Education Systems and School Conditions in Latin America*. United States Bureau of Education Bulletin No. 44, 1923.

7. MERCANTE, VICTOR. *La instrucción pública en la Argentina*, p. 1. No. 59 de la serie de impresos sobre educación. Washington: Pan American Union, February, 1930.
8. *Ministerio de justicia e instrucción pública de la república Argentina en la exposición internacional de Paris del año 1937*. Buenos Aires: Talleres Gráficos de la Penitenciaría Nacional, 1937.
9. *El monitor de la educación comun*, Año LV, No. 764. Buenos Aires: Talleres Gráficos del Consejo Nacional de Educación, August, 1936.
10. *Programas para las escuelas comunes de la capital federal*, pp. 14 ff. Suplemento de "El monitor de la educación comun," No. 758. Buenos Aires: Talleres Gráficos del Consejo Nacional de Educación, 1936.
11. *Recopilación de leyes usuales, decretos, reglamentos, resoluciones, etc., de la república Argentina*, Tomo I. Buenos Aires: L. Lajouane & Cía., 1934.
12. SARMIENTO, DOMINGO FAUSTINO. *Obras de D. F. Sarmiento pub. bajo los auspicios del gobierno Argentino* (Tomos XI, XII, XXVIII, XXX). Buenos Aires: M. Moreno, 1896–99.

SELECTED REFERENCES ON FOREIGN EDUCATION

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DURING 1938 the studies in education issued in the various countries were quite similar to those of preceding years. As usual, they included yearbooks, government educational reports, reports on educational conferences, compilations of collected data, and contributions by individual authors.

Among educational surveys, that of a decennium of education in countries other than the United States is the most comprehensive both as to the area and the duration of time covered. Among conference reports, the five-volume *Proceedings of the Seventh Biennial Conference of the World Federation of Education Associations, Tokyo, Japan, August 2–7, 1937*, is the most detailed.

In England the *Report of the Consultative Committee on Secondary Education with Special Reference to Grammar Schools and Technical High Schools* attracted much interest and attention. It is the fourth of a remarkable series initiated by the Great Britain Board of Education in 1926 with its publication of the *Report of the Consultative Committee on the Education of the Adolescent.* Other publications of the year issued by the board deal with such subjects as the education of backward children, children with defective hearing, the health of the school child, the organization and curriculum at the upper secondary-school level. Mention should be made also of the publication on *Epidemics in Schools* by the Medical Research Council.

Individual contributions to the literature of comparative education include publications such as *The Literacy of the Laity in the Middle Ages* and *The National Mind—English, French, German.*

GENERAL REFERENCES

340. ABEL, JAMES F. *A Survey of a Decennium of Education in Countries Other than the United States.* Chapter VII of Volume I of the *Biennial Survey of Education in the United States: 1934–1936.* United States Office of Education Bulletin No. 2, 1937 (advance pages). Pp. viii+98.

A survey of the trends of education in other countries for 1926–35, inclusive.

341. BUREAU INTERNATIONAL D'EDUCATION. *Annuaire international de l'éducation et de l'enseignement, 1938.* Publications du Bureau International d'Education, No. 62. Geneva: Bureau International d'Education, 1938. Pp. 506.

The sixth of a series giving the principal events in education for the year. This volume is for the year 1936–37 and includes data from sixty-one countries.

342. BUREAU INTERNATIONAL D'EDUCATION. *L'Enseignement des langues anciennes.* Publications du Bureau International d'Education, No. 60. Geneva: Bureau International d'Education, 1938. Pp. 152.

Compiled from data furnished by forty-five countries. It includes information concerning the types of schools in which Greek and Latin are taught and about curriculums, textbooks, methods, and the preparation of teachers.

343. BUREAU INTERNATIONAL D'EDUCATION. *La Rétribution du personnel enseignant primaire.* Publications du Bureau International d'Education, No. 61. Geneva: Bureau International d'Education, 1938. Pp. 236.

A report on the remuneration of primary-school teachers, based on data from forty-eight countries. It includes topics such as salaries, retirement, illness, disability, and pensions.

344. BUREAU INTERNATIONAL DE L'ENSEIGNEMENT TECHNIQUE. *Congrès international de l'enseignement technique, Rome, 28–29–30 Décembre 1936:* I. *Organisation générale, assemblées—voeux*, pp. 654; II. *Rapports déposés*, pp. 1308. Paris: Bureau International de l'Enseignement Technique.

Report of the International Congress on Technical Education held at Rome, Italy, December 28–30, 1936.

345. DEMIASHKEVICH, MICHAEL JOHN. *The National Mind—English, French, German.* New York: American Book Co., 1938. Pp. xii+508.

A definite contribution to the study of comparative education.

346. INSTITUT INTERNATIONAL DE COOPÉRATION INTELLECTUELLE. *L'Organisation de l'enseignement supérieur:* II. *République Argentine, Belgique, Chine, Japon, Pays-Bas, Pologne, Roumanie, Suisse, Tchécoslovaquie, U.R.S.S.* Paris: Institut International de Coopération Intellectuelle, 1938. Pp. 296.

A study of higher education in the countries named. Like Volume I, issued in 1936, it includes for each country a discussion of such topics as the university and the state, interior organization of the institutions, organization of studies, buildings, and finance.

347. INTERNATIONAL LABOR OFFICE. *Technical and Vocational Education and Apprenticeship.* International Labor Conference, Twenty-fourth Session, Geneva, 1938, Report 1. Geneva: International Labor Bureau, 1938. Pp. vi+226.

A splendid summary of the main features of the present situation in the countries covered.

348. KANDEL, I. L. (Editor). *Educational Yearbook of the International Institute of Teachers College, Columbia University, 1938.* New York: Teachers College, Columbia University, 1938. Pp. xvi+400.

The fifteenth volume of the series. Discussions of rural society and rural education in fourteen countries.

349. MOORE, ERNEST CARROLL. *The Story of Instruction—The Church, the Renaissances, and the Reformations.* New York: Macmillan Co., 1938. Pp. viii+576.

A continuation of *The Story of Instruction—The Beginnings*, by the same author, published in 1936.

350. *Problèmes d'université. Travaux de la conférence internationale d'enseignement supérieur, Paris, 26–28 Juillet 1937.* Paris: Institut International de Coopération Intellectuelle et la Société de L'Enseignement Supérieur, 1938. Pp. 432.

Detailed data on the International Congress of Higher Education held July 26–28, 1937, in Paris, France.

351. *Proceedings of the Seventh Biennial Conference of the World Federation of Education Associations, Tokyo, Japan, August 2–7, 1937.* Tokyo: World Conference Committee of the Japanese Education Association, 1938. 5 vols.

In the words of the editors, "These volumes will be found to contain, together with the text of certain of the relative discussions, a complete collection of the papers read or presented at the various sectional meetings, as well as a reprint of the addresses and speeches which were delivered at the general meetings." Volumes IV and V contain the papers prepared by the Japanese delegates and "constitute an authoritative account of every phase of Japanese education."

352. SMITH, HENRY LESTER, and PAINTER, WILLIAM ISAAC. *Bibliography of Literature on Education in Countries Other than the United States of America.* Bulletin of the School of Education, Indiana University, Vol. XIV, No. 1. Bloomington, Indiana: Bureau of Co-operative Research, School of Education, Indiana University, 1937. Pp. 140.

A bibliography of material published during the five-year period, January 1, 1919, to December 31, 1924, on file in the University of Indiana library. The bibliography is supplementary to that of the same name issued during March, 1937, as Volume XIII, Number 2.

353. THOMPSON, JAMES WESTFALL. *The Literacy of the Laity in the Middle Ages.* University of California Publications in Education, Vol. IX. Berkeley, California: University of California Press, 1939. Pp. vi+198.

A monograph that fills a gap in the history of medieval education.

354. USILL, HARLEY V. (General Editor). *The Year Book of Education, 1939.* London: Evans Bros., Ltd., 1939. Pp. 832.

The eighth volume of a series begun in 1932. Part IV is devoted to current educational philosophy: democratic and totalitarian. Part VIII surveys tech-

nical education in the United States, the British Commonwealth of Nations, and a number of European countries. Among other sections of special interest are a survey of education of women in India and a group of studies on language problems in colonial education.

By Countries

AUSTRALIA AND NEW ZEALAND

355. Australian and New Zealand Universities' Conference. *Report of Proceedings, Adelaide, 1937.* Adelaide: Hassell Press, 1937. Pp. vi+130.

Among the subjects discussed at the conference, which was held February 16–19, 1937, were "The Universities and Life," "Problems of the English-speaking University World," "Residential Colleges," "Student Advisers," "Appointments Boards," "New Zealand University Problems," and "Adult Education in Western Australia."

356. Griffiths, M. M. *Part and Whole Methods of Presentation.* Australian Council for Educational Research Series, No. 52. Melbourne: Melbourne University Press, 1938. Pp. 92.

A record of experiments testing the relative values of part and whole methods of presentation of material to be learned.

357. Linz, C. C. *The Establishment of a National System of Education in New South Wales.* Australian Council for Educational Research Series, No. 51. Melbourne: Melbourne University Press, 1938. Pp. 84.

A clear and concise statement of the factors involved in the initiation of the national system of education in New South Wales.

358. Wild, L. J. *An Experiment in Self-Government.* New Zealand Council for Educational Research Series, No. 8. Melbourne: New Zealand Council for Educational Research, 1938. Pp. xii+92.

A record of an experiment at the Agricultural High School, Fielding, New Zealand.

BRITISH COLONIES

359. Mayhew, Arthur. *Education in the Colonial Empire.* London: Longmans, Green & Co., 1938. Pp. xii+292.

An account of education in British Tropical Africa, British Malaya, Fiji, and the British West Indies.

360. Robinson, L. McD. *Administration Report of the Director for Education, 1937.* Colombo: Ceylon Government Press, 1938. Pp. 102.

An interesting and readable report. In addition to the main developments of various phases of education during the school year, it gives an account of the organization of education in Ceylon.

361. Straits Settlements. *Annual Reports on Education in the Straits Settlements and the Federated Malay States for the Year 1937.* Singapore: Government Printing Office, 1938. Pp. 132, 112.

Each of the two reports includes also a historical retrospect and a statement of policy and aims.

CANADA

362. DOMINION BUREAU OF STATISTICS, EDUCATION STATISTICS BRANCH. *Annual Survey of Education in Canada, 1936.* Ottawa: J. O. Patenaude, I.S.O., 1938. Pp. xl+222.

The regular annual survey of education in Canada. Comprehensive and well organized. It includes a directory and a bibliography for 1937.

363. DOMINION BUREAU OF STATISTICS, EDUCATION STATISTICS BRANCH. *The Extent of Language Study in High Schools.* Education Bulletin No. 5, 1937. Ottawa: Dominion Bureau of Statistics, 1937. Pp. 12.

An interesting survey of the study of foreign languages in the eight provinces in which English is the principal language.

364. DOMINION BUREAU OF STATISTICS, EDUCATION STATISTICS BRANCH. *The Size Factor in One-Room Schools.* Education Bulletin No. 3, 1938. Ottawa: Dominion Bureau of Statistics, 1938. Pp. 24.

A discussion of pupil progress in schools of different sizes, teacher differences in schools of various sizes, and differences in cost. Statistical data are given in tables.

365. DOMINION BUREAU OF STATISTICS, EDUCATION STATISTICS BRANCH. *Teachers' Salaries in Six Provinces, 1937.* Education Bulletin No. 2, 1938. Ottawa: Dominion Bureau of Statistics, 1938. Pp. 20.

Presents data for Prince Edward Island, New Brunswick, Ontario, Manitoba, Saskatchewan, and British Columbia.

366. SMITH, ALBERT H., and OTHERS. *A Bibliography of Canadian Education.* Bulletin No. 10 of the Department of Educational Research. Toronto: Department of Educational Research, University of Toronto, 1938. Pp. 302.

A comprehensive bibliography of Canadian education intended for research students and scholars.

367. STEPHEN, A. G. A. (Editor). *Private Schools in Canada: A Handbook of Boys' Schools Which Are Members of the Canadian Headmasters' Association.* Toronto: Clarke, Irwin & Co., Ltd., 1938. Pp. viii+134.

An attempt to collect within a single volume information about the member schools which has so far been scattered in calendars, prospectuses, leaflets, school histories, and similar publications.

CHINA

368. CHUN, CHIN KUO. *L'Enseignement agricole et rural en Chine.* Paris: Pierre Bossuet, 1937. Pp. 232.

After making a general survey of China as an agricultural country, the author discusses the past, the present, and the future of agricultural and rural education in China, with particular stress on the importance of agricultural education for the future welfare of the country.

CZECHOSLOVAKIA

369. *Annuaire statistique de la République Tchécoslovaquie.* Prague: Office de Statistique de la République Tchécoslovaquie, 1938. Pp. 334.

The official statistical annual for Czechoslovakia for the year 1938. Contains data on education, physical culture, sports, and hygiene.

370. STRÁNSKÝ, R. *The Educational and Cultural System of the Czecho-Slovak Republic.* Translated from Czech by Arthur W. Weir and Geoffrey W. Shaw. Prague: Vladimír Žikeš, 1938. Pp. 144.

An account of education in Czechoslovakia.

DENMARK

371. BODELSEN, C. A., and WAAGE, OLAF. *The University of Copenhagen.* Copenhagen: S. L. Møllers Bogtrykkeri, 1938. Pp. 64.

A brief survey of the organization and the activities of the University of Copenhagen.

ENGLAND

372. BOARD OF EDUCATION. *The Education of Backward Children.* Educational Pamphlets, No. 112. London: His Majesty's Stationery Office, 1937. Pp. 68.

The publication aims to suggest to teachers generally some educational principles upon which to base their practice in teaching backward children, particularly children who are backward because they are dull.

373. BOARD OF EDUCATION. *Education in 1937—Being the Report of the Board of Education and the Statistics of Public Education for England and Wales.* London: His Majesty's Stationery Office, 1938. Pp. xii+214.

In line with the fact that "one of the outstanding features of the year 1937 was the widespread interest shown in physical education," chapter i is devoted to the provisions of the Physical Training and Recreation Act of 1937. Among other subjects of interest in the report are school medical service and the Teachers (Superannuation) Act, 1937.

374. BOARD OF EDUCATION. *The Health of the School Child—Annual Report of the Chief Medical Officer of the Board of Education for the Year 1937.* London: His Majesty's Stationery Office, 1938. Pp. 172.

An excellent publication, covering nutrition of the school child, provision of milk and meals, physical education, infectious disease in school children, medical inspection and treatment, chronic tonsillitis and adenoids, open-air schools, skin diseases, squint in children, speech defects, partially deaf children, care of the young child, dental service, minor orthopedic deformities and postural defects, and teaching of hygiene in training colleges.

375. BOARD OF EDUCATION. *The Organization and Curriculum of Sixth Forms in Secondary Schools.* Educational Pamphlet No. 114. London: His Majesty's Stationery Office, 1938. Pp. 90.

An account of education in England on the higher secondary-school level.

376. BOARD OF EDUCATION. *Report of the Committee of Inquiry into Problems Relating to Children with Defective Hearing.* London: His Majesty's Stationery Office, 1938. Pp. viii+150.

By the terms of reference the committee was assigned "to inquire into and report upon the medical, educational, and social aspects of the problems attending children suffering from defects of hearing not amounting to total deafness."

377. BOARD OF EDUCATION. *Report of the Consultative Committee on Secondary Education with Special Reference to Grammar Schools and Technical High Schools.* London: His Majesty's Stationery Office, 1939. Pp. xxxviii+478.

This report is the third of a series developing the theme of the Report on the Adolescent (1926). The Reports on the Primary School (1931) and on Infant and Nursery Schools (1933) dealt with the special problems and opportunities of children of primary-school age. This study returns to the education of boys and girls in the secondary-school period. It was made under the terms of reference: "To consider and report upon the organization and interrelation of schools, other than those administered under the Elementary Code, which provide education for pupils beyond the age of 11+; regard being had in particular to the framework and content of the education of pupils who do not remain at school beyond the age of about 16."

378. HUME, E. G. *Learning and Teaching in the Infants' School.* London: Longmans, Green & Co., 1938. Pp. 256.

A demonstration of the practical application of psychological principles to the education of children under eight years of age.

379. KAYE, MICHAEL. *Child Welfare outside the School.* London: Oliver & Boyd. Pp. viii+246.

A discussion of the social environment, other than that of the school, of elementary-school children in England.

380. LONDON COUNTY COUNCIL. *Annual Report of the Council, 1936,* Vol. V. London: London County Council, 1938. Pp. 28.

An interesting report on education activities in London during the school year 1936–37.

381. MEDICAL RESEARCH COUNCIL. *Epidemics in Schools.* Privy Council, Special Report Series, No. 227. London: His Majesty's Stationery Office, 1938. Pp. 290+xiv.

The interim report of a committee appointed by the council seven years ago to investigate the subject of epidemics and other illnesses in schools from scientific and practical standpoints. In its general introduction the committee states: "This inquiry was begun with two main objects. The first was to study the incidence (with a view to their better control) of those epidemic diseases which in schools each year take so great a toll of child health, and of school time and efficiency. The second was to see how far the lessons learned from experimental epidemiology with animal herds could be applied to human communities."

382. MINISTRY OF AGRICULTURE AND FISHERIES AND DEPARTMENT OF AGRICULTURE FOR SCOTLAND. *Report of the Committee on Veterinary Education in Great Britain.* London: His Majesty's Stationery Office, 1938. Pp. 124.

An account of veterinary education in Great Britain.

383. RODGERS, JOHN. *The Old Public Schools of England.* London: B. T. Batsford, Ltd., 1938. Pp. 112.

An interesting account of the English public schools founded prior to 1800.

FRANCE

384. ARTZ, FREDERICK B. *Les Débuts de l'éducation technique en France (1500–1700).* Extrait de la *Revue d'Histoire Moderne* (September–December, 1937). Paris: Librairie Félix Alcan, 1938. Pp. 56.

A description of technical education in France during the sixteenth and the seventeenth centuries.

385. BEAUMONT, GUY DE. *Guide pratique de l'orientation professionnelle.* Paris: Dunod, 1938. Pp. viii+204.

A practical guide on vocational guidance.

386. DERKENNE, FRANÇOISE. *Pauline Kergomard et l'éducation nouvelle enfantine (1838–1925).* Paris: Les Editions du Cerf, 1938. Pp. 200.

The author aims to show the place of Pauline Kergomard in the history of pedagogy and to present her views on the physical, mental, and moral education of young children.

387. DURKHEIM, EMILE. *L'Evolution pédagogique en France. Bibliothèque de Philosophie Contemporaine:* I. "Des origines a la renaissance," pp. 224; II. "Da la renaissance a nos jours," pp. 228. Paris: Librairie Félix Alcan, 1938.

Volume I is devoted to the development of pedagogy in France to the period of the Renaissance. Volume II continues the story to the present.

388. MILLOT, ALBERT. *Les Grandes tendances de la pédagogie contemporaine.* Paris: Librairie Félix Alcan, 1938. Pp. 178.

A discussion of the sources and the character of the main currents in contemporary pedagogy.

GERMANY[1]

389. *Erziehung und Unterricht in der höheren Schule.* Amtliche Ausgabe der Reichs- und Preussischen Ministeriums für Wissenschaft, Erziehung und Volksbildung. Berlin: Weidmannsche Verlagsbuchhandlung, 1938. Pp. 266.

An official publication on education and instruction in the secondary school in Germany.

[1] See also Item 573 (Hartshorne) in the list of selected references appearing in the December, 1938, number of the *School Review.*

390. PAULSEN, FRIEDRICH. *An Autobiography.* Translated by Theodor Lorenz. New York: Columbia University Press, 1938. Pp. xii+514.

In the concluding paragraph of the Foreword Nicholas Murray Butler states: "In the years from about 1860 to about 1895 or 1900, the University of Berlin reached a height of intellectual distinction which no other institution of higher learning has ever attained and which, unless all signs fail, will not soon be attained again. The great group of scholars among whom Paulsen was a younger member included von Ranke and Mommsen, Trendelenburg and Harms, Droysen and Gneist, Zeller and Dilthey, Curtius and Vahlen, Bonitz and Kiepert, Helmholtz and Wagner, Kirchoff and du Bois-Reymond, Dorner and Pfleiderer, Michelet and Förster, Dernburg and Bernard Weiss. What a galaxy that was, and what a picture those names give of the elevation, the power and the many-sidedness of the intellectual life of that fortunate time! Of that fortunate time, Friedrich Paulsen was himself a great ornament."

INDIA

391. BURMA EDUCATION DEPARTMENT. *Annual Report on Public Instruction in Burma for the Year 1937–38.* Rangoon: Government Printing and Stationery, 1938. Pp. 62+lxiv.

A survey of public instruction in Burma.

392. *Education in India in 1935–36.* Delhi: Manager of Publications, 1938. Pp. viii+140.

The official annual report of the Bureau of Education. Based on reports from directors of public instruction in the provinces and from other educational officers.

393. EDUCATION AND PUBLIC HEALTH DEPARTMENT (EDUCATION). *Report on Public Instruction in the Madras Presidency for the Year 1936–37 and for the Quinquennium 1932–33 to 1936–37,* Vol. I. Madras: Government Press, 1938. Pp. 188.

The letter of transmittal states that the report on education for the quinquennium ending March 31, 1937, was, in the main, one of continued progress. It mentions, in particular, university, secondary, and elementary education, women's education, Mohammedan education, and education of the scheduled castes. The report is a valuable addition to educational literature.

394. VAKIL, K. S. *Education in India.* Kolhapur: K. S. Vakil, 1937. Pp. 72.

A brief historical account.

IRISH FREE STATE

395. *Report of the Department of Education, 1936–37.* Dublin: The Stationery Office, 1938. Pp. 256.

The official annual report on education in the Irish Free State.

JAPAN

396. *Fifty-ninth Annual Report of the Minister of State for Education for 1931–1932 for the Sixth Statistical Year of Syōwa.* Tokyo: Department of Education, 1938. Pp. iv+606.

A general statistical account of education in Japan for the year 1931–32.

397. YAMASHITA, TOKUJI. *Education in Japan.* Tokyo: Foreign Affairs Association of Japan, 1938. Pp. 50.

A brief account of education in Japan.

LATVIA

398. *Statistique de la culture intellectuelle de Lettonie 1918–1937.* Riga: Bureau de Statistique de l'Etat, 1938. Pp. 194.

Contains detailed statistics of education and of intellectual life and culture in Latvia from 1918 to 1937, inclusive.

THE NETHERLANDS

399. IDENBURG, PHILIP J. *Les écoles des Pays-Bas.* The Hague: Edition van Stockum, 1937. Pp. 82.

An interesting account of education in the Netherlands.

NORWAY

400. AREKLETT, B. W. *Norsk skole—og undervisningskalender.* Oslo: Olaf Norli, 1938. Pp. 350.

A good survey of the educational system of Norway, designed specifically to aid the elementary-school graduate in the selection of the type of school at which he wishes to continue his studies.

POLAND

401. *Concise Statistical Year-Book of Poland, 1938.* Warsaw: Chief Bureau of Statistics, 1938. Pp. 388.

Includes detailed statistics of education and cultural life in the Republic of Poland for the year 1938.

SCOTLAND

402. *Education (Scotland). Reports, &c., Issued in 1936–37.* Edinburgh: His Majesty's Stationery Office, 1937. Pp. (644) various paging.

The annual publication of the Scottish Education Department. In addition to statistical, financial, and general reports for the year, it includes statutory rules and orders, circulars and memorandums, and leaving-certificate examination papers.

403. SCOTTISH EDUCATION DEPARTMENT. *School Buildings and Their Equipment.* Educational Pamphlets, No. 2. Edinburgh: His Majesty's Stationery Office, 1938. Pp. 20.

A general description of various types of modern school buildings, including their salient features, and a discussion of their purposes and requirements.

SWEDEN

404. HESSLÉN, GUNNAR, and OTHERS, *Svensk studentkalender, 1938–39.* Sjunde årgången. På uppdrag av Sveriges förenade studentkårers styrelse och under medverkan av talrika fackmän. Lund: C. W. K. Gleerups Förlag, 1938. Pp. x+436.

A survey of the various lines of education which may be pursued by students in Sweden, with particular emphasis on those offered at institutions of university rank.

405. LAGERGREN, KAJSA BARCK, and SÖDERBERG, GERTIE. *Vad vill du bli? Flickornas yrkesval.* Stockholms stads folkskolor. 7:e upplagan. På uppdrag av Stockholms folkskoledirektion. Stockholm: Hasse W. Tullberg, Esselte ab., 1937. Pp. 94.

A book on vocational guidance for girls who have completed the elementary school, issued by order of the Board of Education for Elementary Schools of the City of Stockholm.

406. PEHRSON, ARVID T., and ERIKSSON, LARS H. *Gossarnas yrkesval.* Korta anvisningar rörande vissa yrken och utbildningsvägar. Stockholms stads folkskolor. 8:e Delvis omarbetade upplagan. På uppdrag av Stockholms folkskoledirektion. Stockholm: Hasse W. Tullberg, Esselte ab., 1938. Pp. 78.

A publication on vocational guidance for boys who have completed the elementary school, issued by order of the Board of Education for Elementary Schools of the City of Stockholm.

407. SANDBERG, FR., and KNÖS, BÖRJE. *Education and Scientific Research in Sweden.* New Sweden Tercentenary Publication. Stockholm: Alb. Bonnier's Boktryckeri, 1938. Pp. 76.

An excellent account of education in Sweden.

SWITZERLAND

408. MACK, JOHN A. *Contemporary Adult Education Movements in Switzerland.* London: World Association for Adult Education, 1938. Pp. 52.

An interesting description of the folk high school movement, the workers' education movement, and the folk education homes in Switzerland.

TURKEY

409. *Public Instruction in the Republic of Turkey.* Angora: Press Department of the Ministry of the Interior, 1936. Pp. 70.

A brief account of education in Turkey. It includes school statistics for the years 1923–33, inclusive.

UNION OF SOUTH AFRICA

410. MALHERBE, E. G. (Editor). *Educational Adaptations in a Changing Society.* Report of the South African Education Conference held in Capetown and Johannesburg in July, 1934, under the Auspices of the New Education Fellowship. Capetown and Johannesburg: Juta & Co., Ltd., 1937. Pp. xvi+546.

Under the main theme of educational adaptation in a changing society, the conference tried to face the problem of how to maintain a balance between the two seemingly contradictory demands on education: (1) that of transmitting the accumulated experience of the race from one generation to another, in which "education unconsciously as well as consciously seeks to reproduce type," and (2) that of providing "for growth beyond the type." Although the conference was held in South Africa and "discussed a number of problems in their natural and national setting," the ideas expressed are of universal significance.

411. MALHERBE, E. G. *Educational and Social Research in South Africa.* South African Council for Educational and Social Research Series, No. 6. Pretoria: South African Council for Educational and Social Research, 1939. Pp. x+90.

Part I deals with the needs for social research and describes some of its problems, difficulties, and methods. Part II deals with existing machinery for educational and social research in South Africa and gives a list of actual problems.

412. SMUTS, ADRIAAN JOSIAS. *The Education of Adolescents in South Africa.* Capetown: Juta & Co., Ltd., 1937. Pp. xvi+284.

A comparative and objective study of the theory and the basic problems of the education of adolescents in South Africa.

413. TRANSVAAL EDUCATION DEPARTMENT. *Report for the Year Ended 31st December, 1937.* Pretoria: Government Printer, 1938. Pp. 310.

The regular annual report on education in the Transvaal.

YUGOSLAVIA

414. ROYAUME DE YOUGOSLAVIE, STATISTIQUE GÉNÉRAL D'ÉTAT. *Annuaire Statistique, 1937.* Belgrade: Imprimerie National, 1938. Pp. 422.

The regular statistical annual, covering the year 1937. Contains data on education, culture, and hygiene.

415. *La Yougoslavie par les chiffres, 1937.* Belgrade: Bureau Central de Presse, 1938. Pp. 180.

Contains brief data on education, physical culture, and public-health service.

Educational Writings

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REVIEWS AND BOOK NOTES

METHODS OF TEACHING AND SUPERVISION.—At the elementary-school level, supervision and instruction are closely associated. A book[1] has been published which recognizes this fact by tying up its discussion of teaching and supervision. The authors are well qualified, by professional training and practical school experience, for presenting this helpful book.

The book is arranged in nine chapters, starting with "Methods of Teaching," "Methods of Supervision," and "Classroom Observations," which apply to all the teaching methods and supervisory techniques that are discussed later. Other chapters, such as "Courses of Study," "Activities of Teachers," "Activities of Pupils," "Equipment," and "Community Relationships," are written around the various areas of the curriculum. The question arises whether a better arrangement would not have been to place all chapters concerning subjects or areas in the same section of the book. The final chapter deals with current problems.

A splendid discussion of the training—professional and experiential—of the supervisor is given. This presentation might have been improved, however, by including discussions of a practicum in supervision and of specialized credentials for supervisors.

In a discussion of supervisory estimates of instructional efficiency, mention is made of the basis for promoting teachers to positions of increased responsibility and opportunity. A question arises concerning the meaning of this statement. A transfer to a supervisory position might be a promotion, but should a transfer to a high-school position be considered a promotion? Single-salary schedules which are in vogue in many cities recognize that elementary-school teaching is as important and as difficult as teaching at any other level.

The splendid list of criteria for evaluating instruction might well have included two more items: "Teachers' growth and enthusiasm" and "Pupil growth and interest."

The authors state that supervisors "suggest" changes in teaching methods. Would it not be better so to guide the teachers that they would sense the needed changes?

There are many outstanding features in this book. It is well written, helpful, and practical. It is forward looking and progressive. The picture of the "honor pupil" in the front with the caption, "Is he a happy child?" speaks volumes.

[1] Samuel Smith and Robert K. Speer, *Supervision in the Elementary School.* New York: Cordon Co., 1938. Pp. 460. $2.90.

Narrow specialization is rightly condemned because it restricts creative activities and the unit plan of instruction. The principles of supervision, with their application to teaching practices, are sound and are intelligently selected. The unit plan as a teaching technique is carefully developed. The lists of suggested activities will be found helpful, and the detailed discussions of classroom observations are valuable. The "Questions for Discussion" in each chapter are stimulating and thorough. Well-selected and up-to-date references are given at the end of each chapter. This book will be most helpful to training institutions, to teachers, to supervisors, and to superintendents in service.

ARTHUR S. GIST

Humboldt State College
Arcata, California

A HELP OR A HINDRANCE TO HIGHER EDUCATION?—The philanthropic foundations, which have so frequently examined the internal workings of higher institutions of learning or have furnished the funds by which others have made such examinations, have themselves been brought under review.[1] The task to which the author addresses himself is set forth in the Introduction in the following words.

> The specific undertaking of this research is to describe and interpret the foundation as one of the forces that have stimulated the development of American higher education during the twentieth century. In the broad outlines of a historical survey it will attempt to answer the question: To what extent and in what direction has higher education in the United States been influenced by (1) the educational and social philosophy of the foundations, (2) their administrative organization and procedure, (3) their research and diffusion activities, and (4) their financial resources? [P. 5.]

Persons reading this volume without previous study of the foundations and their grants to higher education are certain to be impressed by the number of foundations operating in the United States and by the magnitude of their grants to higher education in its numerous aspects. In discussing the amounts which have been contributed, the author properly points out that frequently the conditions under which the grants have been made have resulted in the securing of other funds for the same purposes, the influence of the foundation being thus greatly extended. An excellent illustration in point is furnished by grants made by the General Education Board "to provide endowment for increased salaries of college teachers" (p. 191). The grants of the board amounted to $44,220,035, but it estimated that the stipulations surrounding these grants resulted in the addition of at least $120,000,000 to the endowment funds of the institutions to which the grants for faculty welfare were made.

Not infrequently the foundations have been charged with conservatism in the character of the movements that they have sponsored. This challenge is met by evidence indicating that they have been generous contributors to the support of "progressive" movements in higher education. Among the movements that

[1] Ernest Victor Hollis, *Philanthropic Foundations and Higher Education.* New York: Columbia University Press, 1938. Pp. x+366. $3.50.

have received assistance from the foundations are the work of the Commission on the Social Studies of the American Historical Association; experimentation in adult education; such experimental college programs as those of Colgate University, Bard College, Stephens College, University of Chicago, Sarah Lawrence College, Bennington College, and the University of Minnesota; education in the fine arts; studies of child development; and the recent activities of the Progressive Education Association. While the array of evidence on this point is impressive, the reader should bear in mind that no data are submitted regarding the character of the projects which have failed to enlist foundation support.

Errors of a minor character occur in the descriptions of some of the enterprises that have received foundation assistance. These are not of sufficient consequence, however, to detract from the value of the volume as a study of the contribution made by foundations to higher education.

The reader is certain to be impressed by the author's objectivity in dealing with his subject. The weaknesses of foundations and the mistakes that they have made are pointed out, but throughout the entire volume there is abundant evidence of an honest attempt to give to all issues impartial consideration. The volume as a whole leaves the reader with a realization that higher education in the United States is deeply indebted to the foundations and that, while they have made mistakes, their effects as a whole have been highly beneficial.

GEORGE A. WORKS

University of Chicago

PROPOSALS FOR REDIRECTING TEACHER EDUCATION.—Among the various pronouncements concerning needed changes in teacher education, none is more stimulating and thought-provoking than those included in a recent volume entitled *Redirecting Teacher Education*.[1] It presents the results of a joint study by Professors Goodwin Watson, Donald P. Cottrell, and Esther M. Lloyd-Jones, of Teachers College, Columbia University. The report is based on the assumption that "the key to the type of educational reconstruction" urgently needed today "is the quality of the preparation received by teachers" (p. vi). The chief purposes of the authors in preparing their report were to stimulate vigorous thinking and to offer constructive suggestions resulting from "an analysis of contemporary American culture and society and a consideration of the kind of education needed therein" (p. vi). It was hoped that the discussions and the recommendations included would stimulate the persons responsible for the education of teachers to engage in a vigorous co-operative attack on the problems involved.

In the course of their study the authors sought advice and assistance from their colleagues. They also reviewed critically recent recommendations concerning the education of teachers which have been made in professional books, reports, and magazines, and in popular periodicals. Furthermore, help was sought

[1] Goodwin Watson, Donald P. Cottrell, and Esther M. Lloyd-Jones, *Redirecting Teacher Education*. New York: Teachers College, Columbia University, 1938. Pp. x+106. $1.35.

from several lay groups, from interpreters of modern social trends, and from teachers in progressive types of schools. The report does not, however, consist in a summary of the various trends and views identified in this survey; it represents rather the product of a critical evaluation of current theory and practice and the result of independent, constructive thinking concerning the type of teacher education best adapted to contemporary needs.

The report is divided into twelve sections, or chapters, bearing the following titles: "The Need for Better Teachers," "The Objectives of Teachers Colleges," "Selection for the Educational Profession," "The Guidance of Professional Students," "Achievement Standards," "Breadth in General and Professional Education," "Participation as a Part of Professional Preparation," "Research as a Part of Professional Preparation," "New Curriculum Areas," "The Organization of Professional Education," "Special Needs in the Physical Plant of the Modern Teachers College," and "Professional Growth in Service." Although none of these topics is treated at length, so many constructive suggestions are offered that a decade or more of vigorous effort will be required in most institutions to accomplish even the major reforms advocated.

The recommendations made by the authors are, in large measure, in harmony with sound educational theory, for example, the more rigorous selection of candidates for the teaching profession; the organization of selective measures on the assumption that selection is a continuous process; the provision of guidance that will promote the all-round development of individuals; the substitution of qualitative standards of achievement for quantitative requirements which place emphasis on class marks and the amount of time spent in college; broader scholarship as the greatest single need in institutions that prepare teachers; the provision of broad courses for advanced students to help overcome deficiencies in the "previous systematic work in those intellectual disciplines which should characterize broadly educated persons" (p. 42); greater breadth and depth of preparation of more teachers in "subjects" that comprise the great human functions to which general education must give increasing attention; and the organization of new curriculum areas on the basis of a comprehensive study of the functions that education should serve in contemporary life. Such proposals, of which there are scores, characterize the report as a whole. In a large number of cases, concrete suggestions are provided by which institutions can make rapid progress in affecting desirable changes.

The report is not without certain limitations. For example, the problems of teacher education are discussed almost entirely with reference to teachers' colleges and schools of education. Various objective studies show that a surprisingly large percentage of secondary-school teachers receive their pre-service education in liberal-arts colleges. It would have been helpful, therefore, if the report had discussed specifically the procedures by which such institutions could make more adequate provision for prospective teachers. Again, consideration is not given to the types of preparation essential for teachers of the more conventional subjects in the upper levels of general education and at the college level. The

need is urgent for discriminating studies and discussions of the breadth and depth of preparation essential for secondary-school and college teachers of such subjects as history, biology, and literature.

The report rightly points out that a university should utilize all its resources in the study of outstanding problems of contemporary culture and in the provision of advanced training for teachers. The fact is emphasized also that some schools of education are at present approaching this university pattern in the training which they provide for teachers. The authors make a plea for a closer articulation of the graduate disciplines and of education "by the incorporation of the former discipline within the education faculty or through the university as a whole taking responsibility for the advanced program in education" (p. 89). Whatever administrative device is adopted for securing articulation, the need is urgent for closer co-operation between academic groups and the school or department of education than has prevailed in the past. A brief review of the methods by which co-operation has been established recently in several institutions would have been helpful.

In conclusion, the statement should be made that the authors have been highly successful in providing a discriminating, constructive analysis of problems involved in improving teacher education. The report is recommended heartily for intensive study by members of faculties in all institutions that engage in either the pre-service or the in-service training of teachers.

University of Chicago WILLIAM S. GRAY

TWO INTERESTING STORIES FOR YOUNG READERS.—Stratton and Moderow[1] have written a charming narrative and description of frontier conditions and dangers in the period of the American Revolution, showing the difficulties faced by a conscientious young Englishman who was thrown into the midst of the people and conditions in the American Colonies when they were resisting the king and parliament and supporting the "rebel" cause in Virginia.

The title is a little misleading, since it seems to imply that a gallant young Englishman was doing his best to meet and solve the most difficult and hazardous personal problems and questions while Washington was spending an important part of his time in the company of the young belles of the period "tripping the light fantastic toe." As the reader progresses, however, in the absorbing story of the young Britisher, Kit Mason, he discovers that General Washington is in no way disparaged or misrepresented. Finally Kit made his decision by joining Washington's army as a young engineer—engineering being a profession in which he had already shown superior abilities.

The story has strong dramatic interest, supported by a good plot, as well as a pleasing narrative style. It is particularly suitable for children of Grades V and VI.

[1] Clarence Stratton, *When Washington Danced: A Tale of the American Revolution.* Adapted by Gertrude Moderow. Chicago: Scott, Foresman & Co., 1938. Pp. vi+336. $1.00.

Any story of cave men is worthy of attention, and *Little Magic Painter*,[1] which is indorsed and recommended by N. C. Nelson, curator of prehistoric archeology at the American Museum of Natural History, is a welcome addition to the scanty library on cave dwellers of prehistoric times. Such a story is bound to be interesting and attractive to children of the primary grades. Several bits of authentic record are faithfully portrayed and made lifelike in the author's description of a people whose manners, customs, and physical and social surroundings were far different from those of modern and contemporary peoples. The cave men's ingenuity in the fierce struggle for existence and survival is, on the whole, realistically described in this simple narrative of the Stone Age.

On the other hand, some of the situations given in the illustrations are not lifelike in a number of respects, but this defect is not a serious fault for small children. Also, the reader may well question whether it would not have been better for the author to use simpler words, short phrases, and broken, brief sentences and ejaculations, when giving the imaginary conversations of the cave dwellers and their children, in order to represent more faithfully the type of thinking and expression actually employed in those early times. In the illustrations, too, a number of the figures and pictures are, in certain easily recognizable characteristics, too nearly modern in pattern and design.

The little book, however, is a distinct contribution to the meager stock of reading materials on this most interesting period available to small children and their teachers.

R. E. Swindler

University of Virginia

Attractive Supplementary Books.—You may explore the fascinating country of Mexico in a recent book[2] which recounts the experiences of Jimmie and Harriet, who leave their home in San Francisco and travel with their mother down the west coast of Mexico and into Mexico City to meet their father. Here they live in Don Rafael's home, a typical Mexican house built around a patio. Happy experiences await the American children, for they are taken on many trips by the kind Don Rafael, who counts it a pleasure to show them his country. The excursions are made more enjoyable because Don Rafael's grandchildren accompany them.

An early chapter describes a rodeo at a hacienda, where Jimmie and Harriet are introduced to the Mexican cowboys. Other excursions are the trip to Xochimilco, or "the place of the flowers"; the pyramids; the old Spanish city of Morelia; Uruapan; Chapultepec; and Guadalajara, the second city of Mexico.

Perhaps the most interesting festival described—and no doubt the most appealing to young readers—is that of Christmas, which is celebrated for nine

[1] Muriel H. Fellows, *Little Magic Painter: A Story of the Stone Age*. Philadelphia: John C. Winston Co., 1938. Pp. 112. $2.00.

[2] Dorothy Durbin Decatur, *Two Young Americans in Mexico*. Boston: D. C. Heath & Co., 1938. Pp. vi+274. $0.96.

nights with music, fun, and the dramatization of the journey of Mary and Joseph from Nazareth to Bethlehem. Jimmie and Harriet take part in the dramatic procession depicting this journey and enjoy breaking the *piñatas*, fantastic paper figures containing pottery jars full of candies and nuts.

The author evidently has lived in Mexico long enough to have become thoroughly familiar with its legends, history, customs, and industries. Descriptions of all are included in a natural way through Don Rafael's interesting stories at appropriate times in the sight-seeing trips. Some of the stories which will be most enjoyed by the readers are the story of the conquest of Mexico; the legend of Popocatépetl and Ixtacihuatl; the story of how Mexico secured her independence; the origin of the *poblana* dress; and the description of glass-making and pottery-making.

The subject matter and the vocabulary of the book place it at the upper middle-grade level. While it is written in an interesting way, naturally a large number of proper names and of Spanish words add to its difficulty. The author has attempted to meet the vocabulary problem by including at the end of each chapter a glossary of Spanish and Aztec words. The book is enlivened by decorative designs and photographs illustrative of the material. The writer found it an interesting book to review, both because of the subject matter and because of the author's handling of the material. Children of the middle grades will find it an absorbing book, and it will be enjoyed by the whole family.

Another book, *Tick Tock*,[1] will be welcomed by teachers because of the need in the social sciences for material that is authentic, interestingly written, and simple enough in vocabulary to be read by third-grade children.

The authors feel that, since the average textbook or reader in the social sciences does not have space to treat the subject adequately, there is a definite need for a complete book on time-telling devices. The book which they have prepared describes the development of time-telling in chronological order, from the cave dwellers' burning grass rope to the electric clock of today. The book is of the story, rather than the pure informational, type. Jane and her brother Robert have many kinds of experiences with time devices. An interested father tells them stories about such things as the first timepiece and King Alfred and the time candles; they visit grandfather who shows them old Egyptian and Babylonian sundials which he has found in his travels; they visit the Old Curiosity Shop to see water clocks; and later they examine Dutch lamp clocks in the home of Skipper Sam.

The book is attractive in makeup, with clear print and well-placed black-and-white illustrations. *Tick Tock* will be read with pleasure by pupils in the third to the middle grades of the elementary school.

GRACE E. STORM

University of Chicago

[1] Harry Eugene Flynn and Chester Benford Lund, *Tick Tock: A Story of Time.* Boston: D. C. Heath & Co., 1938. Pp. vi+234. $0.88.

ANOTHER BOOK FOR A FUSED COURSE IN SOCIAL SCIENCE.—The eighth and last volume of the Rugg Social Science Series[1] for the elementary schools is a commendable contribution. With "civilization" used to mean "all the ways of living," the concept of a changing civilization is built up, first, by visits to contemporary peoples, civilized and uncivilized, and, then, by a "balloon trip through history." After a chapter on the importance to history of geography, the story of mankind is developed in proper time sequence. The story is rich and full. The authors have been especially successful in exemplifying the fusion idea without departing too far from the historical approach. Due emphasis is given to the geographic factor, as well as to the contributions of geology, anthropology, language, archeology, economic and industrial change, the scientific spirit, and "better thinking through the ages." A major theme is to be found in the title of the concluding chapter, "Man: Child of the Earth and Child of the Past."

The story is well balanced, with the possible exception of an emphasis on the Norse discoveries and explorations in North America which some authorities will consider out of proportion to their historicity and results. The maps and the illustrations are attractive and have real teaching value. The style is forceful and personal in its appeal to the pupil. At the end of each chapter there is a well-selected list of "Books You Would Like To Read."

A *Workbook* and a *Teacher's Guide* accompany the volume. Elementary-school teachers should have access to the whole set of eight volumes. Teachers of the social studies in the junior and senior high school will find *Mankind throughout the Ages* useful with slow groups.

BURR W. PHILLIPS

University of Wisconsin

TEACHING SAFETY THROUGH DRAMATICS.—Teaching safety to young children is imperative if they are to learn to adapt themselves to their complex environments. Thoughtless acts and carelessness are likely to cause both minor and major accidents dangerous to the children and to others. It is only by education that the character-building attitudes upon which safety depends can be established. A helpful book[2] for that purpose includes a group of eight easy, realistic, short plays, each of which takes up the thesis of a different practical problem involved in safety.

Because the settings are simple or because settings can be dispensed with altogether, staging these plays presents no difficulties. Few properties are needed, and those few are available in any school. Boys and girls from the ages

[1] Harold Rugg and Louise Krueger, Man and His Changing Society: Vol. VIII of the Elementary School Course, *Mankind throughout the Ages*. Boston: Ginn & Co., 1938. Pp. vi+584. $1.28.

[2] Fanny Venable Cannon, *Rehearsal for Safety: A Book of Safety Plays*. New York: E. P. Dutton & Co., Inc., 1939. Pp. 132. $1.00.

of six to nine are likely to be interested in planning and giving these simple, objective, safety acts.

In the teaching of safety a variety of approaches to pupil interest are desirable. The dramatic form is an effective method because it allows for a large measure of pupil activity. *Rehearsal for Safety* will be welcomed by teachers because it provides material on the subject in a form popular with children.

HANNAH LOGASA

University High School
University of Chicago

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CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY AND PRACTICE

BUTTERWECK, JOSEPH S., and MUZZEY, GEORGE A. *A Handbook for Teachers: An Integrating Course for Classroom Teachers in Secondary Schools.* New York: E. P. Dutton & Co., Inc., 1939. Pp. xx+218. $2.25.

GRACE, A. G., and MOE, G. A. *State Aid and School Costs.* The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xvi+400. $3.50.

HORN, JOHN LOUIS. *The Education of Your Child.* Stanford University, California: Stanford University Press, 1939. Pp. xvi+208. $3.00.

MELVIN, A. GORDON. *Activated Curriculum: A Method and a Model for Class Teachers and Curriculum Committees.* New York: John Day Co., 1939. Pp. x+214. $2.40.

NORTON, THOMAS L. *Education for Work.* The Regents' Inquiry into the Character and Cost of Public Education in the State of New York. New York: McGraw-Hill Book Co., Inc., 1939. Pp. xviii+264. $2.75.

SWIFT, FLETCHER HARPER. *The Financing of Institutions of Public Instruction in Germany, 1927–1937.* European Policies of Financing Public Educational Institutions, Vol. IV. University of California Publications in Education, Vol. VIII, No. 4. Berkeley, California: University of California Press, 1939. Pp. xviii+(345–694). $3.00.

VIEG, JOHN ALBERT. *The Government of Education in Metropolitan Chicago.* Chicago: University of Chicago Press, 1939. Pp. xviii+274. $2.50.

WILSON, GUY M., STONE, MILDRED B., and DALRYMPLE, CHARLES O. *Teaching the New Arithmetic: What To Teach, How To Teach It, Provision for Professional Growth.* New York: McGraw-Hill Book Co., Inc., 1939. Pp. xii+458. $2.00.

WITTY, PAUL A., and SKINNER, CHARLES E. (Editors), and OTHERS. *Mental Hygiene in Modern Education.* New York: Farrar & Rinehart, Inc., 1939. Pp. x+540. $2.75.

BOOKS PRIMARILY FOR ELEMENTARY-SCHOOL TEACHERS AND PUPILS

ALLEN, ROSS L. *Real Living:* Book I, *A Health Workbook for Boys in Junior High Schools*, pp. 106; Book II, *A Health Workbook for Boys in Senior High Schools*, pp. 68. New York: A. S. Barnes & Co., 1939. $0.50 each.

AMES, MERLIN M., and AMES, JESSE H. *Homelands: America's Old-World Backgrounds.* St. Louis, Missouri: Webster Publishing Co., 1939. Pp. xviii+498. $1.24.

BARKER, EUGENE H., and MORGAN, FRANK M. *Mathematics in Daily Life.* Boston: Houghton Mifflin Co., 1939. Pp. vi+432+vi. $1.32.

Dances of Our Pioneers. Collected by Grace L. Ryan. New York: A. S. Barnes & Co., 1939 (second edition). Pp. 196. $2.00.

EDGREN, HARRY D., and ROBINSON, GILMER G. *Group Instruction in Tennis and Badminton.* New York: A. S. Barnes & Co., 1939. Pp. viii+100. $1.00.

GREENBERG, BENJAMIN B., BROWNFIELD, MARY L., and TAYLOR, ESTHER F. *My Practice Book in Arithmetic:* Book 3, pp. 144; Book 4, pp. 144. Chicago: Benj. H. Sanborn & Co., 1939. $0.28 each.

Handbook of English for Boys and Girls. Prepared by a Committee of the National Conference on Research in English, Robert C. Pooley, Chairman. Edited by C. C. Certain. Chicago: Published under the authority of the National Conference on Research in English by Scott, Foresman & Co., 1939. Pp. 128. $0.60.

KELHER, ALICE V. (Editor); and HESS, FRANZ; LEBRON, MARION; and MODLEY, RUDOLF. Picture Fact Books, Group I. *Air Workers*, pp. 56; *News Workers*, pp. 56; *Nurses at Work*, pp. 58. New York: Harper & Bros., 1939. $0.80 each.

KIBELE, MARY, and VAN CLEVE, CHARLES FOWLER, in collaboration with HOWARD FRANCIS SEELY. *Acquiring Skill in English: For Use with "Experiences in Thought and Expression."* New York: Silver Burdett Co., 1939. Pp. ii+94. $0.48.

Official Sports Library for Women: *Official Field Hockey Guide for Women and Girls Containing the Revised Rules, 1939*, edited by Elizabeth Yeend Meyers, pp. 72; *Official Lacrosse Guide with Official Rules, 1939–1940*, edited by Jenny E. Turnbull, pp. 30; *Official Soccer, Speedball, and Field Ball Guide for Women and Girls Containing the Official Rules, 1939–1940*, edited by Dorothy Zimmerman and Rachel Benton, pp. 64; *Official Softball, Volley Ball Guide with Official Rules, 1939*, edited by Ellen Mosbek and Rosalie M. Allen, pp. 70. New York: A. S. Barnes & Co., 1939. $0.25 each.

PARKER, J. CECIL; PATTERSON, C. PERRY; and MCALISTER, SAMUEL B. *Citizenship in Our Democracy.* Boston: D. C. Heath & Co., 1939. Pp. viii+404. $1.20.

Teachers' Lesson Unit Series: No. 11, *Creative Verse Writing (Grades V–VIII)* by LAURETTA J. ROBINSON, and *Self-Motivation in English (Junior High*

School) by A. SIDNEY GALPER. New York: Teachers College, Columbia University, 1939 (revised). Pp. 36. $0.40.

TIPPETT, JAMES S. *Henry and His Friends.* Yonkers-on-Hudson, New York: World Book Co., 1939. Pp. iv+188. $0.72.

WHITTAKER, MILO L., and JAMISON, OLIS G. *Experiences in Citizenship.* St. Louis, Missouri: Webster Publishing Co., 1939. Pp. xvi+684.

PUBLICATIONS IN PAMPHLET FORM

BRYAN, ROY C., and YNTEMA, OTTO. "A Manual on the Evaluation of Student Reactions in Secondary Schools." Kalamazoo, Michigan: Western State Teachers College, 1939. Pp. 56 (mimeographed).

FOSDICK, RAYMOND B. *The Rockefeller Foundation: A Review for 1938.* New York: Rockefeller Foundation, 1939. Pp. 72.

GRUELLE, ORIE P. *State Insurance of Public School Property in Kentucky.* Bulletin of the Bureau of School Service, Vol. XI, No. 3. Lexington, Kentucky: College of Education, University of Kentucky, 1939. Pp. 136. $0.50.

HANKINS, RUTH. *Principles of Teaching Exceptional Children in the Elementary Schools.* Child Research Clinic Series, Vol. III, No. 1. Langhorne, Pennsylvania: Child Research Clinic of the Woods Schools, 1939. Pp. 22.

Homemaking Cottages: Their Use in Homemaking Education. Written and Compiled by the Federal Writers' Project, Works Progress Administration. Bulletin 322. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 42.

In-Service Education of Teachers. Bulletin 155. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 24.

JONAS, RUSSELL E., GRIEDER, CALVIN, and WAGNER, LORETTA A. *Doctoral Theses in Education. IV.* University of Iowa Studies in Education, Vol. X, No. 5. Iowa City, Iowa: University of Iowa, 1939. Pp. 78. $0.50.

The Language of Modern Education. Bulletin 17. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 46.

MUDGE, EVELYN L. *Transfer of Training in Chemistry.* Johns Hopkins University Studies in Education, No. 26. Baltimore: Johns Hopkins Press, 1939. Pp. x+76. $1.25.

Pertinent Questions and Answers Pertaining to Professional Education, Examination, and Licensure. Bulletin 600. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 50.

Report of the Consultative Committee on Secondary Education with Special Reference to Grammar Schools and Technical High Schools. Board of Education. London: His Majesty's Stationery Office, 1939. Pp. xxxviii+478.

Reporting to Parents. Prepared by a Committee of the New York State Association of Elementary Principals, Arthur E. Layman (Chairman). Bulletin VI. Utica, New York: New York State Association of Elementary Principals (Rollin W. Thompson, Proctor High School), 1938. Pp. 136. $0.50.

SEDER, MARGARET, and SHANNER, WILLIAM M. "Summary and Selected Bibliography of Studies Pertaining to Measurement in the Social Studies and the Natural Sciences." Educational Records Supplementary Bulletin E, New York: Educational Records Bureau, 1939. Pp. 24 (mimeographed). $0.25.

Sight for Tomorrow. Twenty-fourth Annual Report of the National Society for the Prevention of Blindness. New York: National Society for the Prevention of Blindness, Inc., 1938. Pp. 16.

SMITH, HENRY LESTER, and EATON, MERRILL THOMAS. *Two Studies in Arithmetic: A Diagnostic Study of Efficiency in Arithmetic* and *Teaching the Number Facts of Addition.* Bulletin of the School of Education, Indiana University, Vol. XV, No. 2. Bloomington, Indiana: Bureau of Co-operative Research, Indiana University, 1939. Pp. 92. $0.50.

SNOW, CHARLES AUGUSTUS. *The History of the Development of Public School Supervision in the State of Maine.* University of Maine Studies, Second Series, No. 46. Maine Bulletin, Vol. XLI, No. 7. Orono, Maine: University Press, 1939. Pp. viii+100.

Social Services and the Schools. Washington: Educational Policies Commission of the National Education Association and the American Association of School Administrators, 1939. Pp. xii+148. $0.50.

STEWART, MAXWELL S. *Schools for Tomorrow's Citizens.* Public Affairs Pamphlets, No. 30. New York: Distributed to secondary schools and teachers colleges by Silver Burdett Co., 1939. Pp. 32. $0.10.

Teacher Placement: A Phase of Teacher Education. Bulletin 152. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 32.

TRAXLER, ARTHUR E., *The Status of Research in Remedial Reading;* and SPEARS, HAROLD, *The Progress of the Curriculum Movement.* Special Supplement to the *English Journal,* April, 1939. Pp. 32.

VAVRA, HARRY G. *Report on Conservation Education Progress in the United States.* Long Island City, New York: Educational Conservation Society, 1939. Pp. 14. $0.10.

Vocational Agriculture in Pennsylvania. Bulletin 250. Harrisburg, Pennsylvania: State Department of Public Instruction, 1939. Pp. 24.

UNITED STATES OFFICE OF EDUCATION PUBLICATIONS:

"Digest of Annual Reports of State Boards for Vocational Education to the Office of Education, Vocational Division, Fiscal Year Ended June 30, 1938." Pp. 94+statistical and financial tables (mimeographed).

"Ultra-high Frequency Educational Broadcasting Stations." Pp. 102 (mimeographed).

New supplementary reading

PETS ARE FUN. *Community Life Series*

By Dorothea Park, author of *Here Comes the Postman*. Both a story book and a dependable book of information. *Grades* II–III

THE DUTCH TWINS AND LITTLE BROTHER

By Lucy Fitch Perkins. The text of this book was completed by Mrs. Perkins's daughter and the illustrations by her son. The book carries on the traditions of the widely used *Twins Series*. *Grades* II–III

MATEO AND LOLITA

By Burr Durfee and Helen McMorris. Pictures and text about life in Mexico. There are more than thirty full-page photographs. Together with the text, they present many phases of Mexican life—weaving, plowing, threshing, pottery-making, markets, music, clothing, food, and play. *Grades* III–IV

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